THE REGULATION OF DEPOSIT-TAKING FINANCIAL INSTITUTIONS: A COMPARATIVE ANALYSIS OF THE UNITED KINGDOM; GERMANY AND SOUTH AFRICA

Dissertation presented for the Degree of Doctor of Philosophy
at the University of Stellenbosch

Student: Michael Jordaan

Supervisor: Dr. A.S. Jacobs
Co-Supervisor: Prof. G.A. Schoombee

Stellenbosch, January 1997

DECLARATION

I, the undersigned, hereby declare that the work contained in this dissertation is my own original work and that I have not previously in its entirety or in part submitted it at any other university for a degree.

Signature:

Date:

SUMMARY

Standard financial literature contains various explanations for the unique role of deposit-taking intermediaries in an economy. None of these reasons adequately explains the extensive degree of banking regulation evident in practice.

The nature of a deposit, which guarantees capital repayment independent of bank performance, uniquely incentivises banks to be exposed to financial risks. In the absence of appropriate regulation, banks may be tempted to assume an unacceptably high level of risk that could ultimately result in bank failure. Thus, the regulation of banking risks is justified in terms of the public interest theory whereby banking regulation seeks to avoid the market imperfections arising from informational asymmetries and "domino" externalities associated with bank failure. Accordingly, the rationale of banking regulation lies in the protection of consumers and in preserving the stability of the financial system. Direct monetary controls, on the other hand, impact adversely on the risk-management activities of banks.

The framework utilised to analyse and compare banking regulation consists of three broad categories namely: preventative regulation, protective regulation and monetary requirements.

Preventative or prudential regulation is aimed at managing the levels of risks assumed by banks. This form of regulation relates to entry requirements; limitations on certain business activities; the disclosure of risk-related information; the adequacy of capital resources; portfolio restrictions on risk assets; and the sufficiency of liquidity.

Protective regulation is concerned with the immediate protection of depositors and maintenance of overall financial stability once a bank has failed. It consists of crisis management measures and deposit insurance schemes.

Direct, and hence inappropriate, monetary requirements are variations in reserve asset requirements, as well as interest rate and credit controls.

The banking systems of South Africa, the United Kingdom and Germany were chosen to perform a comparative analysis of financial regulation.

The London financial markets are mature and a large variety of banks are regulated in a flexible manner by the Bank of England. By contrast, the strictly regulated German banks dominate their domestic financial system. South Africa is a hybrid of the former systems with a modern banking industry operating in well developed financial markets and supervised according to advanced risk-management considerations.

The analysis of preventative and protective regulation in all three financial systems indicates that banking regulation is indeed concerned with the regulation of banking

risks. The efforts of the Bank for International Settlements to harmonise regulation across domestic financial systems has contributed significantly to improved regulatory techniques for the management of these risks. None of the three systems make use of direct monetary requirements which suggest awareness of the costs associated with such regulation.

A number of recommendations are made to improve financial regulation in South Africa: extension of regulatory coverage to include other types of financial intermediaries who also engage in risky activities; further relaxation of exchange control regulations which restrict the foreign exchange risk management; the adoption of a formal deposit protection scheme; increased consolidated supervision by a single regulatory authority with executive powers; further deregulatory measures in instances where regulations are not appropriate from a risk-management perspective; and re-regulation to the extent that the risk-management activities can be regulated more efficiently.

OPSOMMING

Die finansiële literatuur bevat verskeie verklarings vir die unieke rol wat depositonemende instellings in 'n ekonomie vervul. Geeneen van die redes verskaf 'n bevredigende verklaring vir die wye omvang van bankregulasies in die praktyk nie.

Die aard van 'n deposito is sodanig dat die terugbetaling van die kapitaalsom deur 'n bank gewaarborg word, onafhanklik van die winsprestasie van die bank. Gevolglik het banke die unieke eienskap om hulself aan finansiële risikos bloot te stel. Sonder gepaste regulering sou banke moontlik daartoe geneigd wees om oormatige hoë risikovlakke na te streef wat tot bankmislukking kan lei. Die regulering van bankrisikos vind dus bestaansreg in die teorie van openbare belang, d.w.s. dat regulering die potensiële markmislukkings, wat voortspruit uit asimmetriese inligting en "domino" eksternaliteite, kan voorkom. Die rasionaal van bankregulering is die beskerming van verbruikers, asook die handhawing van 'n stabiele finansiële stelsel. Direkte monêtere beheermaatreëls, daarenteen, het 'n ongunstige uitwerking op die bestuur van risikos deur banke.

Die raamwerk waarbinne bankregulering ontleed en vergelyk word, bestaan uit drie kategorieë, naamlik voorkomende regulering, beskermende regulering en monetêre vereistes.

Voorkomende regulering is daarop gemik om die risikos waaraan banke blootgestel is te bestuur. Sodanige regulering verwys na toelatingsvereistes, beperkings op sekere sake-aktiwiteite, die openbaarmaking van risiko-verwante inligting, die toereikendheid van kapitaalhulpbronne, beperkings ten opsigte van baterisikos en voldoende likiditeit.

Beskermende regulering is gemoeid met die beskerming van deposante en bestaan uit krisisbeheermaatreëls en depositoversekeringskemas.

Direkte (en gevolglik ontoepaslike) monetêre vereistes bestaan uit veranderlike reserwebatevereistes, asook rentekoers- en kredietbeheermaatreëls.

Die bankstelsels van Suid Afrika, die Verenigde Koningkryk en Duitsland is gekies vir 'n vergelykende analise van finansiële regulering.

Die finansiële markte in Londen is hoogs ontwikkeld en 'n groot verskeidenheid en aantal banke word op 'n pragmatiese wyse deur die Bank of England gereguleer. In direkte teenstelling daarmee word die Duitse banke, wat hul binnelandse finansiële markte domineer, onderwerp aan 'n streng formele toesighoudingstelsel. Die Suid-Afrikaanse finansiële stelsel bevat elemente van beide bogenoemde stelsels, by wyse van 'n moderne banksektor, wat funksioneer in goed ontwikkelde finansiële markte en gereguleer word ooreenkomstig gevorderde risikobestuursbeginsels.

Die analise van voorkomende en beskermende regulering in die drie finansiële stelsels, bevestig dat bankregulering inderdaad afgestem is op die regulering van

finansiële risikos. Die pogings van die Bank van Internasionale Vereffeninge om die regulasies in finansiële stelsels internasionaal met mekaar in orreenstemming te bring het wesenlik hiertoe bygedra. Die vermyding van direkte monetêre vereistes dui verder daarop dat toesighoudende owerhede bewus is van die nadele van sodanige regulering.

'n Aantal aanbevelings word gemaak, naamlik: meer omvattende regulering ten einde ander finansiële instellings wat ook finansiële risikos bestuur, te dek; verdere verslappings van valutabeheermaatreëls wat tans die bestuur van wisselkoersrisiko beperk; die totstandkoming van 'n formele depositoversekeringstelsel; 'n groter mate van gekonsolideerde toesighouding; verdere deregulering in gevalle waar regulasies vanuit 'n risikobestuursoogpunt nie wenslik is nie; en her-regulering in die mate waartoe die risikobestuurspraktyke meer effektief gereguleer kan word.

PREFACE

This study was conceived during 1992 in Hamburg, Germany where, as an inexperienced trainee of the Deutsche Bank, I had to come to terms with a veritable minefield of German banking regulations. In typical German fashion, the statutory reports were completed with devotion by my colleagues, yet the underlying objectives of the Deutsche Bundesbank in demanding such detailed information remained vague. Over time it became apparent to me that the cornerstone of banking business is the assumption and management of financial risk and that, in a somewhat crude fashion, the Bundesbank was attempting to monitor and control banking risks. In contrast, I learned the South African Reserve Bank unambiguously embraced the optimisation of risk-management by banks as its regulatory mission.

The risk-management approach to regulation did and still does not feature prominently in the conventional financial literature, although bank failures which occurred subsequent to the inception of this study have increased academic and popular interest in this fascinating field of study.

My good fortune to have stumbled upon a relatively unexplored facet of regulation continued in South Africa when in 1993, Dr. Japie Jacobs and Prof. Andrie Schoombee consented to guide me through a comparative study of banking regulation. Apart from his academic prowess, Dr. Jacobs is eminently versed in the practical aspects of banking regulation, having been responsible for the banking supervisory function during its formative South African years. His insight proved to be invaluable. Prof. Schoombee's advice on financial theory considerably enhanced my initial attempts to formulate a risk-management approach to banking regulation and his grasp of the subject matter greatly improved the accessibility of the entire text.

I am also indebted to a great many other friends, family-members, colleagues and mentors: to Prof. Sampie Terreblanche for hopefully engendering in me some of the qualities of an economist; to the late Hermann Josef Abs for inspiring a passion for banking; to my Father for his unreserved support, encouragement and constructive suggestions; to my Mother who managed to suppress the urge to enquire how my research was progressing; to Paul Harris for imparting some of his tactical banking skills; and to my friends who managed to put up with this for so long.

Thank you

Gewidmet in Dankbarer Erinnerung an meine liebe Grossmutter, Hedwig Caecilië Jordaan, gestorben am 5 März 1995. Sie war meine stetige Inspiration für die Vollendung dieser Dissertation.

"Iucundi acti labores!"

"Angenehm (sind) die getanen Arbeiten"
Cicero : De Finibus 2, 32, 105.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF DIAGRAMS

LIST OF APPENDICES

SECTION A

A SURVEY OF FINANCIAL REGULATION

CHAPTER 1

INTRODUCTION

The White Rabbit put on his spectacles.
'Where shall I begin, please your majesty?' he asked.
'Begin at the beginning,' the King said, very gravely, 'and go on till you come to the end: then stop.'

Lewis Carrol in Alice's Adventures in Wonderland

1.1 Background

A number of commentators[1] have remarked upon the major structural trends and changes currently experienced in financial systems world-wide. A common theme is that the evolution of financial systems[2] is to a large extent influenced by the simultaneous pressures of competition, increasing globalisation, the impact of opportunities created by technology, innovation and changes in the strategic objectives of financial institutions. As a result of these factors, financial systems are evolving in several fundamental ways:

- Financial institutions are increasingly being transformed into multi-product firms engaged in a much wider range of services than has traditionally been the case. In particular, fee income and off-balance sheet business has increased.
- The financial system is moving from a specialist base to a more universalist (or conglomerate) structure which has eroded traditional distinctions between the major areas of finance such as commercial banking, investment banking, housing finance, insurance, fund management and securities trading.
- The financial system is becoming more market-orientated.

Structural changes relate to a number of fundamental issues that need to be addressed in every financial system. Examples of these basic issues include the distinction between specialist and universalist principles in a financial system, the role and extent of competition in the financial system, the 'openness' of the financial system, issues related to the resource, allocative and functional efficiency of the financial system and the mechanism for ensuring the 'safety and soundness' of the financial system. Central to all these is the issue of *financial regulation.*

---

[1] See for instance Gardener (1988), Goodhart (1995), Llewellyn (1991), Metais (1989) and the OECD (1989).

[2] The financial system is understood as consisting of four essential elements being non-financial economic units (lenders and borrowers), financial institutions (intermediaries in the lending and borrowing process), financial instruments and financial markets.

Historically, financial systems and particularly the financial institutions operating within the system have been extensively regulated. This is due to the strategic importance of the financial system in any economic system. As Gurley and Shaw (1970: 123) have pointed out, the 'real world and the financial world are one world'.

Structural change in the financial system poses major new challenges to regulators and regulatees alike. In a dynamic model of regulator-regulatee action and reaction known as the 'regulatory dialectic' (Kane 1987), many structural developments in the financial system have also been stimulated by changes in the regulatory environment. Equilibrium regulatory structures (if they exist at all) generally develop adaptively over time.

The fundamental regulatory challenge is therefore to constantly adapt regulations to structural changes in the financial system. It is no longer adequate for regulatory policies to be developed primarily as a reaction to a banking crisis caused by excessive risk-taking. Regulatory innovations must match the corresponding innovations in the financial system.

The evolution of national financial systems has been accompanied by major changes in the *policy of financial regulation* (Llewellyn 1991(b)). First, there has been a decisive shift away from the concept of regulation based upon protecting financial institutions from competitive market pressures towards more competitive market structures. As stated by the OECD (1989):

> *'there has been increasing recognition that the approach to bank regulation and supervision adopted in the twenties and the thirties which largely consisted of global protection of the financial system against the potentially destabilising impact of excessive competition was becoming counterproductive....National authorities increasingly adopted the view that the highly diversified and complex and rapidly changing financial services needs of modern economies could no longer be adequately met by over-protected and over-regulated financial systems, particularly in an environment of increased internationalisation.'*

A second change in the approach to regulation has been a generally held view that considerations of 'efficiency' in the financial system should be accorded a higher priority and that this is most effectively achieved in a competitive financial system with a greater role given to market mechanisms. Related to these considerations is a third change: a greater emphasis in regulatory arrangements to the concept of 'competitive' neutrality between potentially competing sectors and institutions. Finally, structural deregulation and other forms of deregulation in the financial system have been accompanied by a greater degree of supervisory (or prudential) regulation in a process of 'reregulation'.

The regulation issue raises a number of basic questions. Why and to what extent is the regulation of financial markets and financial institutions justified? What are the principles that guide financial regulation? How and why does regulation vary in different financial systems? What are the lessons to be learned from differing (and

similar) regulatory approaches? What forms of regulation are economically justified? In this context it is important to keep in mind that regulations normally imply costs. Thus, even if a regulation is judged to have beneficial effects, it is also important to investigate its costs and weigh them against the associated benefits.

This dissertation will examine the financial regulatory regimes that apply to deposit-taking institutions in three financial systems, namely the United Kingdom (UK), Germany and South Africa, in an attempt to answer the above questions.

1.2 Research Problem

> *'I have no data yet. It is a capital mistake to theorise before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts.'*
> Sherlock Holmes in The Strand Magazine.

In the course of the last decade, financial systems around the world have been the subject of dramatic change, induced by factors such as the international integration and domestic liberalisation of financial markets. Moreover, periodically occurring financial crises have impacted significantly on the role played by various financial institutions. The conventional approach to financial regulation is no longer appropriate in the light of the far-reaching changes that have taken place in financial systems. This modern conviction is echoed in a classical remark by Tobin (1967: 509):

> *'I hope that those who continue to work on this fascinating subject will not hesitate to take from time to time a fundamental and radical look at the institutions they are appraising.'*

Tobin's 'fascinating subject' was financial regulation.

The significant structural trends affecting all financial systems are likely to continue and even intensify during the next decade. In this rapidly changing environment, the ability to adapt has become a crucial condition for financial efficiency and economic soundness. Under these circumstances both banks and regulatory authorities have adopted a new approach towards financial regulation. This approach - which is based on risk-management - differs from the conventional approach which emphasises the prevention of a run on bank deposits.

The *leitmotiv* of this dissertation is that modern banking entails the management of a series of financial risks and that regulation is (and indeed should be) aimed at ensuring that these risks are kept at acceptable levels. Accordingly, the research problem is as follows: to a large extent current regulatory frameworks accurately reflect the realities of modern deposit-taking financial intermediation (i.e. risk-management). A supervisory approach based on compliance with a prescribed set of balance sheet ratios is no longer effective for the risk-management activities of banks. A new approach to regulation - with the aim of ensuring that banks have the ability to control and manage financial risk adequately - has developed in response to the changing financial environment. This dissertation will document and analyse the new approach to banking regulation with reference to three financial systems, namely the United Kingdom, Germany and South Africa. The purpose of these case studies is to demonstrate the new approach to banking regulation; and to focus on regulatory differences and similarities between the three sophisticated financial systems.

In Chapter 2 an overview is presented of deposit-taking financial intermediation and the existing theories of finance which seek to justify the regulation thereof. The risk-management approach to financial regulation does not intend to disprove these

theories, but rather intends to indicate their inadequacies from a regulatory point of view and to incorporate existing financial-regulatory theory into a more comprehensive risk-management paradigm.

The risk-management approach towards banking regulation allows policy-makers to return to basic principles in constructing new regulatory systems. This is superior to building on existing frameworks that may largely have developed in *ad hoc* fashion in response to deficiencies revealed in banking failures and / or systemic crises caused by banks taking excessive risks.

1.3 Value in Terms of the Possible Outcomes

A survey of universal economic literature compiled from the American Economic Association's *Journal of Economic Literature* (EconLit CD-Rom 1996) reveals that a rich topical literature has developed around a variety of issues related to financial regulation. Although aspects of risk in finance have received due attention[3], there is no generally accepted conceptual framework pertaining to the risk-related activities of deposit-taking financial intermediation.

The dynamic nature of financial systems makes it imperative that the structure and policy of financial regulation be continually evaluated in order to determine that it accurately reflects changing competitive and market conditions. It has been stated that risk rises geometrically with the pace of change - and the perception of risk lags behind (Cade 1987: 1). This indicates that the ability of the market to innovate is often greater than our ability to comprehend the accompanying risks. It also serves to highlight the importance of risk-related financial regulation.

By any standards, South African academic research in the field of financial regulation has been and currently remains sparse[4] with only a number of pioneering exceptions proving the rule.[5] Similarly, international comparative studies on financial regulation[6] have not included a South African dimension even though the general approach of the 1990 South African Banks Act and the risk-management regulatory approach adopted by the South African Reserve Bank may be said to be advanced by international standards. The paucity of interest in this field of economics is partly the result of South Africa's forced isolation from the international community especially during the period from 1985 to 1992. A case in point is that South Africa was not invited to participate in the formulation of international regulatory policy, a process managed by the Basle Committee of the Bank for International Settlements. The re-integration of the local financial sector into the global market has necessitated a degree of regulatory adaptation, in order to obtain an internationally level playing field in financial markets. This research project seeks to be both a useful extension of the existing international literature, as well as a stimulus for further academic debate specifically within the South African context.

On a practical level, it is submitted that prudential concerns with 'risk-management' implicitly or explicitly constitute a major part of modern regulatory frameworks and supervisory practices. By comparing differing regulatory approaches it identifies

---

[3] See for instance Schaefer (1987), Furlong (1988), Hogan and Sharp (1988), Kelly (1988), Berger and Udell (1990), Gilbert (1990), Kambu (1990), Avery and Berger (1991), Davies and McManus (1991), Furlong and Keeley (1991), Gelles (1991), Genotte and Pyle (1991), Levonian (1991), Mitchell (1991), Bundt (1992), Goyeau and Tarazi (1992), Mei (1994) and Eisenhauer (1994), Helwig (1995) and Santomero (1995).

[4] Computer search of the NAVO Database, Centre for Scientific Research, Human Sciences Research Council.

[5] See Brümmerhof (1988), Marais (1991), Van Greuning (1991), Broadway (1994) and Van Greuning (1993).

[6] See for instance Dale (1982), Baltensperger and Dermine (1987) and Hall (1987).

those areas in which prudential and protective regulation should receive more (or less) attention from supervisors. The study also directs regulatory attention at remaining and inappropriate monetary controls.

The analysis will also lend itself to a number of specific policy recommendations with regard to the respective financial systems as well as some general conclusions beyond the confines of deposit-taking financial intermediation.

1.4 Methodological Framework

The dissertation is divided into two separate but integrated sections.

Section A contains a survey of current literature on financial regulation with the aim of constructing a theoretical model for the analysis of the topic matter as well as developing a framework within which empirical data can be presented.

Against the background of deposit-taking financial intermediation as sketched in Chapter 2, both the rationale for financial regulation and the principles that should be guiding such regulation are presented in the third Chapter. The fourth Chapter is concerned with the identification and discussion of the prudential, protective and monetary components of financial regulation for the purpose of drawing international comparisons.

Section B provides a country-specific comparison of financial regulation in three selected financial systems with regard to the framework constructed in section A, and concludes with a comparative analysis.

The fifth Chapter is concerned with the selection of the three financial systems compared in the dissertation being the UK, Germany and South Africa. First, the motivation for their selection is stated. This is followed by a look at their financial markets and the institutions operating therein with the intention of providing a basic overview of each system. Chapter 6 deals with the regulatory authorities and the general approach to regulation within each financial system. Chapters 7, 8 and 9 contain a discussion of the regulation of deposit-taking financial institutions in each financial system with specific reference to the various components of regulation identified in the fourth Chapter.

Chapter 10 provides a comparative analysis of financial regulation. First, the major issues generated in Section A are considered and the research problem revisited. Second, the conclusions reached as regards prudential regulation, protective regulation and monetary controls in all three countries are compared. Third, the specific South African issues which became evident in the study are discussed. The dissertation closes with a conclusion and a general policy recommendation.

1.5 Explanation of Terminology

A study of this nature, being broad and specific at the same time is bound to involve a variety of terms. As the following are used throughout, it is appropriate to provide a brief explanation:

Bank of England

Bank of England, London - Executive body responsible for the regulation of UK banks which reports to the Chancellor of the Exchequer. Supervisory duties are formalised by the Board of Banking Supervision.

Deposit-taking (financial) institution / Bank

Financial institution which accepts deposits from the general public as a regular feature of its activities. The term deposit-taking (financial) institution is used interchangeably with the term bank. Similarly, the terminology of 'deposit-taking (financial) intermediation' is used interchangeably with 'banking'.

BIS

Bank for International Settlements, Basle - the Basle Committee on Banking Supervision is based at the BIS.

FBSO

Federal Banking Supervisory Office, Berlin - the central German regulatory organ for banks, subject to the Federal Ministry of Finance.

FSB

Financial Services Board, Pretoria - regulatory body responsible for the regulation of financial institutions and services in South Africa (with the exception of banks) and subject to the Ministry of Finance.

Policy Board

The Policy Board for Financial Services and Regulation, Pretoria - advisory body responsible for the co-ordination of financial regulation policy in South Africa.

Reserve Bank / South African Reserve Bank / SARB

South African Reserve Bank, Pretoria - executive body responsible for the regulation of South African banks and subject to the Ministry of Finance. Supervisory duties are carried out by the Department of Banking Supervision headed by the Registrar of Banks.

Risk

Risk, in the general sense, is the probability that the actual outcome of a future event may be different from the expected outcome. As used here, the term refers to the possibility of negative consequences intrinsic to the process of deposit-taking financial intermediation. The following traditional banking risks are considered: capital risk, credit risk, interest-rate risk, market risk, currency risk and liquidity risk.

Regulation / Supervision

The terms *regulation* and *supervision* are used interchangeably to cover all forms of direct and indirect, formal and informal, interventions or practices of a bank regulator. In a stricter sense, *regulation* connotes a specific exercise of a legislatively or administratively delegated authorisation by an appropriate governmental authority, whilst supervision implies the oversight practices and functions of such authority over the subject matter of their authority (in the present case of deposit-taking institutions).

CHAPTER 2

BASIC ISSUES

2.1 Finance

> *'Money is a mechanism for doing quickly what would be done (anyway), less quickly, without it'*
>
> John Stuart Mill

> *'One can easily exaggerate the importance of finance...but the suggestion that it usually falls into line and accommodates real forces...stretches belief'*
>
> Charles Kindleberger

Finance in the modern economy performs many functions. A list of these can be found in many textbooks and is not repeated here.[7] But central to all financial activity is the transfer of funds from those whose current holdings of money exceed what is needed for immediate planned expenditures (surplus units or lenders) to those whose current holdings of money fall short of what is needed for immediate planned expenditure (deficit units or borrowers). This transfer of funds is subject to a number of differing conditions and consequently financial contracts can take a wide variety of legal forms. A basic distinction is between those where the contract between the lender and borrower is direct and those where each deals separately with a third party.

In the first case, the surplus unit lends money directly to a deficit unit and thereby acquires a claim on the deficit unit. The two parties may be brought together by a broker, but the latter acts only in an agency capacity: the contract is between lender and borrower. It follows that the contract will be largely symmetrical in that the rights of one party will correspond to the obligations of the other.

This type of financing can take place only to the extent that lenders' requirements in terms of *risk*, *return* and *term* can be matched with those of the borrowers. Generally, a conflict exists between the needs of borrowers and lenders. For instance, if it is a long-term loan then the lender has no claim on his money before the expiry of that period of time. However, in an uncertain world, most lenders demand the possibility of recovering their funds if they have need of them, whether for expenditure on goods and services or in order to take advantage of alternative investment opportunities. Lenders usually have a desire for some degree of liquidity, but many borrowers have a strong preference for long-term funds.

This imbalance in the market can be overcome in two ways. One is by making the claims of lenders negotiable and having markets where these can be traded. A lender will be more willing to give funds to a borrower for a fixed term if he knows that, at any time within that period, he can sell his claim on the borrower to a third party. If the lender's claim is easily and inexpensively negotiable in an organised

[7] For an accessible text on the theory of finance see for instance Allen (1983).

market, it is obviously a more liquid asset than in the absence of such negotiability. This is considered to be one of the prime economic functions of organised financial markets: to increase the liquidity of financial assets and so make them more attractive to lenders (Harrington 1991: 261-262).

Second, the differences in the preferences of borrowers and lenders can be overcome by means of indirect, as opposed to direct finance. It is this topic which is discussed hereafter.

2.2 Financial Intermediation and Financial Institutions

In the case of indirect finance, financial institutions acting as principals are involved and there are two transactions instead of one. Surplus units lend to the financial institution and acquire legal claims on that institution; the financial institution lends to deficit units and acquires claims upon them. There is no direct link between surplus units and deficit units and no direct claims of the former on the latter. The essence of financial 'intermediation' is the imposition of a third party between the ultimate borrower and lender.[8]

Why do financial institutions exist? Financial institutions perform several functions. The traditional view stresses three of these (Goodhart 1989: 104-113). First, they alleviate imperfections in financial markets and in information gathering and portfolio management. If it were not for such imperfections, everyone could in theory manage his own financial assets as competently as a professional financial manager. A second function of financial institutions is to provide insurance services. This type of financial intermediation need not involve much risk-taking by the intermediary as long as assets can be matched to (the actuarial expectation of contingent) liabilities. However, it may also constitute managing insurance risks. The third type of financial intermediation involves issuing liabilities of a kind preferred by lenders (at relatively low yields) and investing a proportion of the funds in higher-yielding earning assets of a form which borrowers prefer to issue.

The newly emerging theory of financial intermediation is focused on the role of *information asymmetries*[9] in determining the need for, and form of financial institutions. The new approach follows the line of argument pursued by Bernanke and Gertler (1985: 1-5):

> *'The basic premise is that, in the absence of intermediary institutions, financial markets are incomplete. This incompleteness arises primarily because of certain informational problems. By specialising in gathering information about loan projects, financial intermediaries help reduce market imperfections and thus facilitate lending and borrowing. Accordingly, changes in the level of financial intermediation due to either monetary policy, legal restrictions, or other factors, may have significant real effects on the economy.'*

In a broader setting, this model implies that banks play an important role in the real allocation process and are not merely acting as 'financial veils'. Critical to this result is the premise that both banks and depositors have their own information about certain aspects of their respective opportunities and needs.

A number of economic *benefits* are created by the ability of financial institutions to transform the unacceptable claims on borrowers into acceptable claims on

---

[8] For an overview of the theory of financial intermediation see Hester (1994).

[9] The economics of assymmetric information (which is the study of all transactions in which not all of the parties have the same facts) have secured James Mirrlees and William Vickrey the 1996 Nobel prize in economics.

themselves.[10] First, through aggregating small amounts of funds for on-lending in larger parcels, liquidity is created for the lender. Second, through investing in a diverse portfolio of assets a financial intermediary can achieve a more efficient diversification of risk than an individual lender. Third, by providing liquidity and reducing risk, financial intermediaries are able to access savings that otherwise would not have been available. In the fourth place, by facilitating the availability of finance these institutions ease the constraint of income on expenditure, thereby enabling the consumer to spend in anticipation of income and enabling the entrepreneur to acquire physical assets. Finally, through their expertise financial intermediaries help to ensure that the flow of funds is allocated efficiently.

[10] For a more detailed elucidation of the topic see Faure (1976: 15-19).

2.3 Deposit-taking Financial Intermediation

In the previous section, the various functions which financial institutions perform were enumerated, and the reasons why financial institutions issue liabilities and hold assets were discussed, as well as the advantages to be gained therefrom. In this section attention is focused on the role, functions and the peculiar nature of one specific intermediary: the deposit-taking financial institution or bank.

The general function of intermediation is performed by many different types of institutions. The distinguishing features are to be found in the nature of the claims and services offered to lenders and in the nature of the claims acquired and services offered to borrowers.

Amongst financial intermediaries a basic distinction can be drawn between non deposit-taking institutions and deposit-taking institutions. As the name indicates, the most important differentiating feature is to be found in the special nature of a deposit. A deposit can be defined as an amount of money paid by a surplus unit to a financial intermediary subject to an agreement in terms of which an **equal capital amount** will be repaid. The legal nature of a deposit is therefore such that its value is stated by contract to **be independent of the portfolio held by the intermediary.** Consequently, there is a fundamental difference in the liabilities of deposit-taking institutions and those of contractual savings institutions. Deposit-taking institutions (banks) are those that accept deposits from the general public as a regular feature of their activities.[11]

What differentiates banks from other financial intermediaries? Deposit-taking institutions fulfil a unique role in the economy of a country.[12] Views differ as to why banks are different and what the implications of these differences are for financial regulation. A number of theories exist, each of which stresses a different aspect of the special nature of deposit-taking institutions.

2.3.1 Payments and Money Transmission Services

First, banks have traditionally provided and operated the main *payments and money transmission services* in the economy. They were the principal depository institutions where the public held its cash for transactions purposes. In the performance of this function, banks generated current account balances described as the 'bedrock of their resources' (Wilson Committee 1979). For a long time, current deposits have represented a stable base on which banking developed. Indeed Newlyn (1971: 16) argues that the '*only feature which is peculiar when the transaction is with a bank is that, in this case, the particular financial asset created functions as the generally accepted means of payment; it is money. In the case of all other financial institutions, the financial assets created, though they may be almost indistinguishable from*

[11] It is readily conceded that these general definitions are easily blurred by the complexities of modern financial systems.

[12] For a comprehensive analysis see Clark (1976).

money as assets, have to be changed into money in order to make payments'. Accordingly, the role of banks in the payments system is seen as the main reason for the special regulatory treatment of banks.

There are obvious advantages in having a smoothly operating payments system. It is extremely convenient if no risk of default applies to these balances. Thus central bankers have traditionally regarded the integrity of the payments system as a vital objective (Gowland 1991: 10). Although banks' hegemony in money transmission activities still remains, it is being increasingly challenged by new financial and technological innovations and by regulatory changes, the effect of which is to lower the barriers to entry and to disperse the money transmission and settlement services between institutions other than banks (Podolski 1986: 40).

2.3.2 Conduits of Monetary Policy

Second, as taught in all introductory textbooks, banks actually 'create' money whenever they make loans. In the words of James Tobin (1963):

> *'Perhaps the greatest moment of triumph for the elementary economics teacher is his exposition of the multiple creation of bank credit and bank deposits. Before the admiring eye of freshmen he puts to rout the practical banker who is sure he 'lends only the money depositors entrust to him.' The banker is shown to have a worm's eye view, and his error stands as an introductory object lesson in the fallacy of composition. From the Olympian vantage of the teacher and the textbook it appears that the banker's dictum must be reversed; depositors entrust to bankers whatever amounts the bankers lend.'*

The *money creating ability* of banks is linked to their role in the money transmission mechanism[13], as bank deposits serve as the generally accepted means of payment for most transactions. By accounting identity, changes in the money stock can be expressed in terms of changes in the high-powered money-base in an algebraic formula that (in its basic form) depends on the reserve asset ratio maintained by banks. Banks need to hold only a fraction k, set by regulation, convention or prudence of their deposit liabilities as reserves in base money. In an equilibrium in which they hold no excess reserves their deposits will be a multiple $1/k$ of their reserves; they will have created $(1-k)/k$ of substitute money. The orthodox, monetarist view on this base-multiplier process is that the high-powered base is *exogenously* given, i.e. determined by the central bank. Changes in the high powered base are taken to originate in the actions of the central bank's open market operations. Exogeneity of the money stock is defined by the ability of the central bank to control the quantity of money via the monetary base (Chick 1973: 85).

---

[13] The money transmission mechanism is not to be confused with the monetary transmission mechanism (the channels through which changes in monetary policy affect policy targets. For a discussion on the role of banks in the monetary transmission process see for instance Dale and Haldane (1993).

The alternative, post-Keynesian view is that the direction of causality is precisely the reverse of the conventional view, i.e. that the money supply is *endogenously* determined by changes in the demand for bank credit. It is argued that central banks have no direct ability to restrict the growth of the high-powered monetary base. The policy implication of this view is that the only exogenous variable that the central bank can and does determine is the interest rate (Moore 1989).

Post-Keynesians also differ from monetarists who treat the asset side of bank balance sheets as significant. Instead their attention is focused on the liability side of bank intermediation.

Note that these are extreme views, with a variety of interpolar approaches existing in the literature.[14] Regardless of which theoretical approach is adopted, there is an obvious balance sheet identity between total bank assets and total bank liabilities (i.e. total assets will always equal total liabilities). Furthermore, changes in the monetary environment will logically impact on both banking assets and liabilities. Consequently, the following discussions on the impact of monetary policy on bank behaviour will deal with both the asset and liability portfolio management practices of banks. The approach adopted here is therefore inclusive of both of the extreme monetary schools of thought and of the intermediate views.

In effect the discussion on whether 'loans make deposits' or *vice versa* falls outside the scope of this study. The above exposition does, however, serve to accentuate the important role of banks, either as (passive or active) creators of money or more specifically as *conduits of official monetary policy*.

2.3.3 Channeling and Allocating Financial Resources

A third reason why banks are considered 'special' is derived from their key role in *channelling and allocating financial resources* to the rest of the economy and therefore in the financing of economic growth and development.[15] Admittedly, banks are no longer the sole conduit for the flow of financial resources, but they remain critical in this process. Sustained economic achievement in any country depends on a good level of productive investment. Capital is seen as the embodiment of new production methods and the vehicle of technical progress.

In a comparative study on the subject Goldsmith (1969: 48) concluded that in 'most countries a rough parallelism can be observed between economic and financial development when periods of several decades are considered'. The parallelism in the long-run development of financial and real structures raises the question of a possible causal connection. Goldsmith (1969: 48) was unable to supply a definite answer: 'there is no possibility, however, of establishing with confidence the direction of causal mechanism, i.e. of deciding whether financial factors were responsible for the acceleration of economic development or whether financial development

[14] See Pierce and Tysome (1985).

[15] According to Schumpeter (1911: 72-74) bankers are the gatekeepers of capitalist economic development; their strategic function is to screen potential innovators and advance the necessary purchasing power to the most promising.

reflected economic growth whose mainsprings must be sought elsewhere'. Arguably, financial institutions, while facilitating growth, do not act as entrepreneurs. In the absence of entrepreneurs, even the best financial system will not ensure economic growth. Kitchen (1986: 68-70) considers both the theoretical arguments and the historical evidence on the relationship between financial and economic development and although he finds no conclusive evidence it appears that the majority of opinions favour the view that financial development leads economic development.

However, modern views on financial evolution stress the response to profit opportunities arising out of anomalies found in the financial sector. These frictions are produced by *inadequate information* reflecting market segmentation and excessive transaction costs. Thus, innovation designed to overcome such frictions is an important element in the evolving structure of the financial sector. Financial change is therefore increasingly seen as a process of making markets more efficient by overcoming market frictions or imperfections. As Diamond (1984) has shown, the delegation of screening and monitoring of borrowers to banks is an efficient allocation mechanism. Furthermore, banks can derive economies of scale in the acquisition of information and its use to take advantage of profit opportunities (Wood 1981: 146-152).

Differences in financial systems also have important implications for economic performance and development.[16] The financial systems of different countries exhibit considerable differences in both *structure* and *practice* and regulation is a major determinant of such differences. It is therefore not surprising that the role of banks in economic development is a much discussed topic in financial literature and often the issue of heated political debate.[17] Edwards (1987) argues that there is a strong link between the Anglo-American heritage for the organising of industrial finance and the record of relatively low growth. He stresses that the German economy, which is a largely integrated financial-industrial-government system, a product of the Great Depression, has produced productive industry by means of bank-industry co-operation. A comparison of data on long-run economic growth, and financial structure by De Long (1988), also suggests that financial systems characterised by a greater reliance on bank finance and close links between banks and industrial companies have achieved higher rates of economic growth than systems where the relationship between banks and industry is less strong. The first group of financial systems include Japan, Germany and other continental European countries while the second group covers mostly Anglo-American countries such as Australia, New Zealand, Canada, the United States and the UK. The issue will be taken up again when discussing the motivation for selecting the financial systems described in this study.[18]

---

[16] Although, as Gertler (1988) points out, the working hypothesis of most economists has long been that the structure of financial intermediation is irrelevant.

[17] The proposals from some South African economic commentators that banks be forced to lend to certain sectors of the South African economy can be regarded as stemming not only from purely social but also from developmental considerations.

[18] See paragraph 5.2

2.3.4 Major Depository for the Public's Savings

Fourth, banks serve as a *major depository for the public's savings*. Most of the funds deposited with deposit-taking intermediaries originate from a large number of smaller and less financially sophisticated savers. Clark (1976) discusses a number of propositions why funds obtained from households are in need of special protection, namely that it is easier for insiders to steal from financial intermediaries than from ordinary corporations, that the risk level of a financial intermediary can be changed abruptly and without timely notice to savers, that households are systematically disadvantaged by market-imperfections (such as the cost of obtaining accurate, relevant and intelligible information) and the so-called thesis of human fallibility which holds that people need to be protected against themselves.

2.3.5 Vulnerability to Financial Collapse

A fifth and final reason why banks are considered unique in an economy derives from the conviction that banks are *vulnerable to financial collapse*. Why are deposit-taking institutions thought to be inherently unstable? Three strands of thought emerge from the literature: high financial gearing, reliance on short-term deposits to finance illiquid assets and lack of transparency (Dale 1982: 53-55).

The first strand of thought is that the intermediary function of banks necessarily implies a relatively high degree of financial gearing, or ratio of debt to equity capital. In the very early stages of the development of banking the lending and depository functions were largely separated. The early great banking houses lent out not other people's money but their own capital, while other institutions only accepted money for safekeeping. Following the integration of these functions by the early nineteenth century, equity capital resources relative to the total assets held by banks have fallen sharply. Therefore it is the intermediary, rather than the lending function of banks that determines the relatively low capital base and high gearing of these institutions.

The second and related strand of thought is that because of their high financial leverage banks can best be described as 'conditionally solvent', the condition being that depositors do not collectively withdraw their deposits. An argument formalised by Diamond and Dybvig (1983), and further explained by Postlewaite and Vives (1987), Jacklin and Bhattacharya (1988) and Freeman (1988), is that an important activity of banks is to finance illiquid assets with short term deposits. This creates the potential risk that savers, motivated by bad news about the market value of assets held at financial institutions or by any other scare, may rush to withdraw their funds. In both cases there is a cost since illiquid assets may have to be sold at a loss.[19] Moreover, the failure of a single financial institution could eventually trigger a signal regarding the solvency of other financial institutions leading to a systemic crisis.

[19] However, Edwards and Mishkin (1994) outline how fundamental economic forces have led to a decline in traditional banking (that is the process of making long term loans funded by short-dated deposits). The declining competitiveness of traditional banking has increased the incentives of banks to make more risky loans or to engage in 'non-traditional' banking activities that promise higher returns but involve greater risk.

The third strand of thought centres on the reason for banks being prone to sudden precautionary deposit withdrawals in an unregulated market. The financial condition of a bank is not readily determinable by analysts, even with sophisticated techniques at their disposal, let alone ordinary depositors, since risk parameters cannot be adequately assessed on the basis of published reports or other publicly available information. Furthermore, even if the relevant information were obtainable it would very quickly become outdated since banks can adjust their risk-profile within a very short period. Finally, many depositors may find it difficult to interpret any rating or evaluation of a particular institution. This lack of transparency means that on the one hand a bank's financial condition can deteriorate markedly before financial markets become aware of it, while on the other hand even the soundest of institutions can fall victim to ill-founded rumours that cannot easily be dispelled.

It is therefore apparent that a number of reasons support the notion that finance in general and banks in particular fulfil a special role in the economy of a country. Without denying that the general framework of economics is relevant, it is the contention of this section that none of the above reasons why banks are special are entirely satisfactory to explain the entire range of non-monetary financial regulations that are applied in practice to deposit-taking institutions. A more pragmatic approach to deposit-taking intermediation is necessary. The conventional views of banking activity are no longer adequate to explain either the occurrence of bank failure or to justify preventative and protective banking regulation in practice. The next section will introduce the concept of financial risk in order to introduce the risk-management approach to financial intermediation.

2.4 Financial Risk

Risk is at the heart of financial regulation. All financial intermediaries are exposed to risk and the management of risk is a function intrinsic to financial intermediation.[20] In the case of banking the risk that depositors may demand payment on short notice in the face of illiquid assets is but one such risk. **Modern banking exposes the deposit-taking institution to a wide variety of risks, each of which could be the underlying cause of instability and bank failure.**

What is risk? By its very nature risk is a somewhat elusive concept. In this regard it is worth quoting Tobin (1992) at length:

> *'The risks incident to economic activity take many forms. Some are nation-wide or world-wide - wars and revolutions, shifts in international comparative advantage, government fiscal and monetary policies, prices and supply of oil and other basic material. Some are specific to particular enterprises and technologies - the capacity and integrity of managers, the quality of new products, the local weather. A financial intermediary can specialise in the appraisal of risks, especially specific risks, with expertise in the gathering and interpretation of information costly or unavailable to individual savers. By pooling the funds of its creditors, the financial intermediary can diversify away risks to an extent that the individual creditor cannot, because of the costs of transactions as well as the inconvenience of lumpy denominations.'*

It is important to note that in a market economy, all market participants are exposed to risk of various kinds. However, the issue of risk is of paramount importance to banks. If banks do not manage their risk exposure adequately, the instability which may result may have an disproportionate impact on financial stability and hence the overall economy.

The following risks are usually identified as traditional banking risks (Cade 1987; Moore 1989: 48):

Capital or solvency risk, namely the risk that the capital resources of an institution may be adversely affected by all the financial risk components named below and / or other external developments (i.e. event or business risk), can be regarded as an encompassing risk category.

Credit risk: Credit risk can be defined as the risk that the counterparty to an 'asset' (debtor in respect of loans and advances or issuer of securities) will not be able to repay the full capital amount and / or accrued interest when due. In an uncertain world asset losses cannot be avoided entirely. The task of bank management is to

[20] According to Hester (1994: 133-149) elemental risks in finance include: nominal interest rate risk, prepayment risk, default risk, liquidity risk, systemic risk, market risk, idiosyncratic risk, innovation risk, manipulation risk and purchasing power risk.

lend prudently, so that total loss of certain assets in the asset portfolio will be more than covered by the excess of asset income.

Market / price risk: Market risk concerns the possibility of a capital loss resulting from making investments or taking positions in one of the following four economic markets:

- commodities
- fixed interest-bearing instruments, in both the
  money market and
  capital market
- equities; as well as
- currency

Interest rate risk: When interest rates change, the value of the assets and loans held in the portfolio of a deposit-taking institution also change, but not necessarily in a compensating manner. The risk that changes in rates might adversely affect the net portfolio value and portfolio income of institutions is referred to as an interest rate risk.

Currency risk: Currency risk may be defined as the risk of changes in exchange rates having a negative impact on the mismatch between foreign receivables and foreign payables.

Liquidity risk: Deposit-taking institutions must be able to meet their commitments when these become payable. Such commitments may take the form of demands for cash withdrawal, new credit and transfers. The inflow and outflow of funds will not necessarily balance. Deposit-taking institutions should therefore allow for the occurrence of possible liquidity mismatching stemming from contractual variations in cash flows over different periods.

It is the contention of this study that deposit-taking institutions do not passively accept their exposure to these risks. Instead **modern banks are actively managing risks with due regard to the returns generated by risk exposure**.

The roots of this contention are to be found in Chant's (1992) 'New' theory of financial intermediation. Chant (1992: 62) highlights monitoring costs[21] and enforcement costs[22] to explain the concentration of non-marketable securities (such as loans) in the portfolios of deposit-taking institutions. Chant (1992: 57) reasons that: 'the deposit-taking institution appears to provide an efficient solution to monitoring and enforcement problems. The agent who is delegated with the responsibility for monitoring and enforcement, guarantees a fixed payment to his depositors and becomes a residual claimant to the remainder of the income. Thus, his returns are directly dependent upon his performance.'

---

[21] Monitoring costs are incurred to ensure that loaned funds are used for the intended purpose.

[22] Enforcement costs are necessary to make borrowers fulfil repayment obligations.

Although Chant (1992) does not cast the theoretical net wide enough when he singles out monitoring and enforcement as the primary risk-related banking activities, his analysis does provide the key towards understanding why banks actively manage risk.

A more general explanation is as follows: The nature of a deposit is such that it guarantees the repayment of an equal capital amount to depositors independent of the performance of the assets in the bank's portfolio. Traditionally, banks have employed the deposits which they have received towards granting higher yielding loans; and have received a return for the credit risk thus assumed. It is on this level that enforcement and monitoring are valid and indeed important banking functions. However, modern banks no longer confine themselves to managing credit risk.

Consider the implications of a bank accepting a deposit from a customer at a fixed rate of interest and then investing the proceeds in a (higher yielding) variable rate security issued by the government. In this case the bank has assumed virtually no credit risk (as the government is considered to be one of the least likely counterparties to default on its loan obligations) and monitoring and enforcement functions therefore become irrelevant. However, the bank has assumed an interest rate risk, namely the risk that the value of assets and loans may change as interest rates change. Consequently, the bank has engaged in the management of another type of financial risk.

Similar consideration obviously apply to the other categories of financial risk set out above. Modern banks manage the whole spectrum of financial risks in order to generate higher returns for shareholders. Certainly Chant's (1992) reasoning remains relevant, namely that banks are the direct beneficiaries of the returns generated by their portfolios. The basic point is that deposit-taking institutions themselves assume risks, whereas other financial intermediaries often pass the capital risk on to the investor (Jacobs 1992: 82). It follows that banks are uniquely incentivised to actively assume risk in order to generate high returns. Modern banking has therefore evolved into managing financial risk to achieve appropriate risk-reward profiles. **It is in this context that the regulation of deposit-taking intermediaries acquires its justification**. In the absence of regulation, banks may be tempted to assume too high a level of overall risk and thereby jeopardise the interests of depositors and other stakeholders.

Accordingly, a key issue in managing risk in financial institutions is the identification of whose interests are being served. In principle there are a number of stakeholders in any financial institution whose interests can be affected through exposure to risk: owners / shareholders, management, board of directors, employees, auditors, depositors, loan customers, general public, supervisory authorities and taxpayers (Van Greuning 1993). It has been argued that, ideally, management decisions should be taken in the interests of shareholders. However, in practice the management of a bank's risk exposure is often directed more towards the interests of depositors (Davis 1990). This reflects the pressure placed on financial institutions by regulators, who, motivated by the fear of a crisis of confidence among depositors

and the destructive effect of a 'bank run', see it as their responsibility to protect depositors.

Once risk exposures of banks have been identified as well as stakeholder attitudes towards them, the practical problem of implementing a policy to achieve the desired exposure (i.e. managing the exposure) becomes paramount. Banks manage their exposure to risks in a number of different ways (Davis and Harper 1991: 5). One approach is to assume offsetting positions with different groups of customers or, more generally, to rely on the 'law of large numbers' to reduce aggregate exposure. Another approach to risk-management is to use specialised financial instruments such as options[23], swaps[24] and futures[25] contracts whose function is the transfer of risk from one party to another. A third approach is to 'self insure' and attempt to incorporate an appropriate risk-premium in the price of the product. For instance, credit risk can be managed by a credit appraisal procedure which ensures that the interest margin on loans compensates for the risk-profile of a loan.

Risk-management practices may differ between financial institutions for a number of reasons. One reason is that different lines of business give rise to different needs for risk-management. A second reason is that attitudes towards particular types of risk, and thus the incentive for risk-management, may vary across institutions. A third reason for differences in risk-management practices stems from the nature and source of regulatory control. Where financial institutions are forced to comply with various reporting guidelines and meet certain externally imposed prudential standards, the choice of a risk-management system is naturally affected. Finally, financial sophistication, perceptions of the need for risk-management and the ability to implement risk-management procedures vary across institutions.

The above analysis of risk does not suggest that deposit-taking institutions and their activities can be explained adequately by any single set of factors. Nevertheless, risk-management considerations appear to be essential elements of any theory which seeks to explain the functions, activities and portfolio behaviour of deposit-taking institutions. This approach recognises that deposit-taking institutions actively manage and shape risks rather than just adapt passively to risks that face them (Chant 1992: 62-63).

This view is both old and new. It is old in the sense that the advantages of pro-active economic behaviour has long been recognised by economists such as Keynes (1924) when he wrote:

---

[23] An option contract conveys onto the buyer (seller) thereof a right, but not the obligation to purchase (sell) the underlying instrument at a fixed price on a specified future date.

[24] A swap is a contractual agreement between two parties to exchange a series of payments for a stated period of time. When combined with an asset or liability, a swap can change its risk characteristics by changing the net cash flow, e.g. a fixed-rate liability can be converted into a floating rate liability.

[25] A futures contract is a form of a forward contract in that it conveys the right to purchase or sell a specified quantity of an asset at a fixed price on a fixed future date. The essential features of a futures contract is that they standardise the quantity of the underlying asset to be delivered (the contract size), the underlying financial instrument or index and the period of the contract.

> *'Unfortunately it is not possible to make oneself permanently secure by any policy of inaction whatever. The idea which some people seem to entertain that an active policy involves taking more risks than an inactive policy is exactly opposite to the truth. The inactive investor who takes up an obstinate attitude about his holdings and refuses to change his opinion merely because facts and circumstances have changed is the one who in the long run comes to a grievous loss.'*

Much has happened since these words were written. New ideas and events have tended to push these words aside. Yet they are as relevant today as when they were written, and in the present context suggest support for active financial risk-management.

Accordingly, the view also finds support in the more recent contributions on the theory of financial intermediation which have focused upon the role of intermediaries in overcoming *information imperfections* (Llewellyn 1995(a)). These imperfections give rise to a role for intermediaries as 'monitors' of contracts (Diamond 1984), information 'signallers' (Leland and Pyle 1977) and providers of insurance against such events as illiquidity, interest rate changes and other risks (Lewis and Davis 1987). In brief, the services provided by intermediaries are those of risk-taking and insurance against risks. This perspective appropriately places a primary focus on the risk-management activities of intermediaries.

Yet in another important sense this view of financial institutions is new. Much of the existing literature on the theory of financial intermediation contains more complete theories designed to explain the portfolio behaviour of intermediaries than to explain the existence and functions performed by intermediaries. Many of the implications arising from the recognition that financial institutions actively manage risks have not been fully developed.

One implication of such a view is the danger that theories of portfolio choice developed for intermediaries do not adequately reflect the functions performed by those intermediaries.[26] A second and for the purposes of this study more relevant implication is that **regulatory efforts with regard to deposit-taking intermediaries should be directed at the risk-management activities of these institutions**. It is within this context that the rationale of and principles guiding financial regulation will be discussed in the next Chapter.

---

[26] The behaviour of deposit-taking institutions in response to market-changes is modelled typically on the basis of the Tobin-Markowitz model of portfolio selection (Tobin 1982). The choice of this model depends implicitly on the assumption that intermediaries serve mainly the **risk-transfer** function between investors on the basis of differences in their willingness to bear risk. Even in this context these models fail to incorporate the transaction costs required to explain the existence of intermediaries. More fundamentally this modelling fails to capture the essential elements of deposit-taking intermediaries to the extent that their existence depends on advantages in **risk-management**. As a basis for further research on this topic the interested reader is referred to Carmichael and Davis (1991) and Chant (1992).

2.5 Summary and Conclusion

Profit is the result of risk wisely selected.
Frederick Barnard Hawley (1843-1929)
Enterprise and the Productive Process

Financial activity essentially consists of the transfer of funds from surplus units to deficit units. Financial intermediation involves the imposition of a third party between the ultimate borrower and lender. The newly emerging theory of financial intermediation stresses the need for financial institutions to overcome information asymmetries between market participants.

Deposit-taking institutions / banks serve a unique function in the economy as: providers of payments and money transmission services, conduits of monetary policy, allocators of financial resources as well as acting as major depositories for the general public's savings. Of greater importance, banks are also considered vulnerable to financial collapse because of their exposure to a wide variety of risks. The historical threat of deposit runs has faded only to be displaced by the threats to banks arising from the use of increasingly sophisticated financial products with accompanying financial risks. Modern banks actively manage these risks with a view to attaining their desired risk-return profile. The major implication of this new view of deposit-taking financial intermediation is that financial regulation should be concerned with the risk-management activities of banks.

CHAPTER 3

FINANCIAL REGULATION

3.1 Introduction

Rags make Paper
Paper makes Money
Money makes Banks
Banks make Loans
Loans make Beggars
Beggars make Rags

Anonymous, 18th Century

The above quotation may seem somewhat gloomy in content; but is intended to be so in purpose as well. As was argued in the previous Chapter, banks are not only considered to be subject to instability but the consequences of such potential instability are deemed to be far more serious than in the case of other economic entities. The risk of bank failure is without doubt the main *raison d'être* for financial regulation, both within the domestic financial system and also from an international point of view. Similarly, the perceived causes and negative implications of bank failure are the major determinants of the scope and nature of financial regulation.

What is regulation? Regulation generally suggests the intervention of government or some authoritative body in the economy. More often than not the legal framework is employed for this purpose although regulation may sometimes be more subtle. In a broader context, regulation is also performed by the unseen hand of the market. An efficient market regulates through penalising institutions which adopt inappropriate risk : return positions. A higher risk position invariably requires a higher compensating return. Excessive risk together with the inability to achieve this return, may be ultimately penalised by failure through the operation of market forces.

Llewellyn (1986: 16) identifies six aspects of regulation:

- *Environment*: This form of regulation occurs when the ability of a financial institution to operate is limited by the general economic environment such as occurs when restrictive monetary policy influences the credit extension of financial institutions.

- *Statutory regulation*: This form of regulation occurs when limitations are placed upon the type of business that an institution may conduct.

- *Self-imposed regulation*: Financial institutions may be part of a cartel or may have unilaterally agreed not to become involved in certain types of business.

- *Moral suasion*: This type of regulation usually occurs when the overall authority of the regulatory organ is such that regulations are adhered to on request.

- *Self-regulation*: This form of regulation occurs when a formal agency for a specific financial activity is established by financial intermediaries in the private sector. The agency is empowered to regulate the business of the particular financial activity through the formulation of standards, prudential requirements and rules.

- *External agency*: This form of regulation normally involves an independent or external agency that is given statutory power to regulate an industry. In a number of countries, the function of bank supervision does not rest with the central bank, but with an external agency.

It is already clear that regulation is not an easy concept to pin down outside a specific context. The economics literature does not contain a universal and widely accepted definition of regulation. At one extreme is the strict definition of regulation which implies governing in accordance with the law. At the operational level, regulation refers to control over what individual economic units may do and sometimes how they can perform these activities (Gardener 1986: 29).

For present purposes, regulation is identified broadly as all manners of direct intervention in the activities of banks. The term as used here therefore comprises three elements being preventative or *prudential* regulation, *protective* regulation and *monetary requirements.*

Prudential measures are those aimed directly at policing the levels of risks assumed by deposit-taking intermediaries. Components of prudential regulations include entry requirements, permissible business activities, disclosure requirements, capital adequacy, liquidity adequacy and risk asset limits. Protective measures, on the other hand, offer protection to depositors or to the deposit-taking intermediaries themselves. Components of protective measures include various forms of deposit insurance and emergency assistance. Monetary measures covered here involve the use of direct, non market-orientated policy instruments such as interest rate controls, credit ceilings, credit allocation by regulation and changes in reserve asset requirements.

This Chapter deals with the main reasons for and the principles which should (and in one case should not)[27] govern such regulation. It prefaces with an overview of the two major theories of regulation, namely the public interest theory and the private interest theory; as well as an identification of the costs generally associated with regulation. This is followed by a consideration of the rationale for financial regulation. Three major themes are discussed under this heading, namely the stability of the financial system, consumer protection and monetary considerations. After covering the evolution of financial regulation, the problem of establishing principles to guide policy and by which to judge intervention acquires relevance. The following principles are discussed: efficiency, stability, competitive neutrality and social objectives.

[27] Namely in the case of social objectives; see paragraph 3.5.4.

3.2 Theories of Financial Regulation

Banks and banking activities are closely regulated and supervised in most financial systems. Yet the analytical basis justifying many financial regulations is not so secure, and indeed has been under strong challenge by economists.[28] The traditional polar textbook theories concerned with regulation in economics are the microeconomics based *public interest theory* and the more cynical *private interest theory* popularised by Stigler (1978) and others of the Chicago school.

3.2.1 The Public Interest Theory of Financial Regulation

Under the public interest theory, regulation is required to maximise social welfare where various types of market failure have occurred. In the context of financial regulation, the most frequently cited examples are the existence of natural monopolies and other forms of imperfect competition, imperfect information and the existence of (negative) externalities (Goodhart 1989: 202-213; Hall 1991: 167; Thornton 1992).

In terms of the public interest theory, regulation is imposed with the sole motivation of increasing economic efficiency. The regulator thus intervenes in situations where distortions such as imperfect competition and externalities exist in the market. This type of regulation, according to classical theory, is assumed to be virtually without cost and is implemented by means of instruments such as taxes, subsidies and tariffs. The motivation for the regulation is to create a 'second best' market where some measure of economic efficiency can be attained despite the existence of imperfect markets (Marais 1991: 40).

Although the ultimate rationale of all regulation rests with various forms of market failure and market imperfections, the nature of these imperfections in the financial sector differ from those in the real economy. Indeed, the nature of regulation is also different in the case of non-bank financial institutions compared to banks (Llewellyn 1995(a): 205).

The first condition, which relates to the existence of *natural monopolies*, need be of little concern to a study of regulation in the financial services sector since there are only a few instances of such natural monopolies. One example of such a monopoly is the role of a clearing house within a payment system. It may be efficient to have only a single clearing house provided that the owners of the clearing house (e.g. existing banks) do not exclude competitors, or allow them access on disadvantageous terms. There is, therefore, a case in these circumstances for regulatory intervention to ensure fair access to the services of the clearing house (Goodhart 1989: 202-203).

---

[28] See for instance Benston and Kaufman (1996) who argue that most of the arguments that are frequently used to support special regulation for banks are not supported by either theory or empirical evidence. It is reasoned that banks should be regulated only to reduce the negative externalities resulting from government induced deposit insurance.

The condition related to the possible existence of *externalities* has greater application in the financial field. The failure of one bank may cast doubt on the viability of others, and a contagion of panic withdrawals may result.

Even so, one may ask as Goodhart (1989: 203) does: 'where lies the externality?' If banks are solvent, they should be able to meet a run and continue. If not, the run may concentrate losses on those left behind in the queue to withdraw, but the losses would have been suffered anyway. The answer is twofold. First, the need to realise assets to honour deposit liabilities would drive down asset prices and raise real interest rates. Also, the fixed nature of capital and the weakness of secondary markets make the search for additional funds by a solvent but illiquid bank costly and difficult.[29]

The literature is not clear about the precise source and cause of externalities arising from bank failures. Nevertheless the existence of such externalities has generally been accepted by most economists. Llewellyn (1995(b): 205) for instance, holds that the particular market failure justifying regulation is the social cost of bank failure exceeding the private costs borne by the bank's depositors and shareholders. The main line of defence is emergency assistance measures by the central bank, whereby the central bank lends to the bank experiencing difficulties in order to lessen the need for the bank involved to dump assets in depressed markets or to call in loans. A second line of defence is to introduce various forms of deposit insurance.

The existence of externalities within the financial system justifies the regulatory control of the risks provided that the constraints imposed by the regulation of risk adequately are less than the potential social costs of the externalities involved.

Related to regulation to limit negative externalities such as a contagious panic in banking and financial markets, a large part of modern financial regulation is intended to meet the third main market imperfection: *information problems*.

Consumer choice lies at the heart of the economic notion of allocative efficiency. However, the choice of preferences by consumers will only result in allocative efficiency if decision makers have adequate information on the set of alternatives available, including the consequence to them of exercising choice in different ways; and if they are capable of processing that information and of 'rationally' behaving in a manner that maximises their expected utility (Ogus 1994: 38).

Clearly, it is possible to identify situations in the financial services industry in which the information generated by the unregulated market is likely to be far removed from perfect (or even sub-optimal) information, thereby allowing for regulatory measures.

---

[29] There are many historic examples of occasions when the failure of a bank which had become overextended to a certain class of borrower is followed by a refusal of banks or other intermediaries to extend credit and even attempting to reduce their exposure to that class. Because of the fixed nature and weak second-hand markets for existing capital assets this may lead to potentially avoidable negative externalities. As Bernanke (1983) suggests, it may have been the failure of banks, and the impairment of their ability to grant credit, rather than the contraction of the money stock, as such, that was primarily responsible for the extent of the American depression in 1931-33.

The cost to banking consumers to acquire adequate information on which to base the assessment of the risk-profile of the bank is substantial. Furthermore, the ability of depositors to understand the complexities of risk-management to such an extent that it allows for 'rational' utility maximising choices is questionable.

Llewellyn (1995(a): 206) points out the various market imperfections or market failures which would not be in the public interest in a regulation-free environment. These include:

- problems of asymmetric information;
- problems of inadequate consumer information;
- under-investment in information by consumers; and
- inability of all consumers to assess the quality of financial products and institutions.

As such, regulation can be justified on cost grounds, as supervisors will accumulate information relevant to the supervisory process which could only have been obtained by depositors at a much higher cost, if at all. The superior information of regulators on the management of risk by banks is therefore considered a justification for intervention within the public interest theory.

The traditional justification of bank supervision is the prevention of 'welfare' losses arising from 'bank runs', which can result from such informational asymmetries. As was shown above this is not a completely satisfactory explanation. Instead it can be argued that regulators are in a better position to judge the overall risk exposure of banks than some other stakeholders and especially depositors.

Moreover, the insights gained in the previous Chapter from the 'new' theory of deposit-taking financial intermediation presents the opportunity of enhancing the public interest theory to take explicit cognisance of banks as managers of financial risks. The line of reasoning is as follows:

Banks perform a certain type of financial intermediation which allows them to retain the full rewards for the risks which they expose themselves to and also manage actively. Although banks generally steer a conservative risk-reward course, the incentive to increase risk in search of higher rewards may cause them to take excessive risks. Should a bank fail due to excessive risk-taking this does not per se represent a market failure; indeed it may confirm the effectiveness of market forces (excessive risk exposures should be 'punished' by the market). Yet as banks occupy a special position in any financial and economic system, bank failures have consequences stretching much further than the failure of other economic entities. Two considerations are of particular importance, namely consumer protection and systemic stability.

Consumer protection can be justified in terms of the public interest theory if informational asymmetries existed. This would be the case if consumers were unaware of the riskiness of the banks to whom they entrusted their monies; or unable

to gauge the risk-profile of banks. In both cases there is a justification for financial regulation to counter the 'market failure' which has occurred.

Market failure would also occur if the failure of a single banking institution were to lead to the contagion of the financial system via the so-called 'domino effect'. Again, the public interest theory permits both protective and preventative regulation, with the intention of counteracting the negative externalities inherent in systemic instability.

Accordingly, the approach favoured here is the public interest theory of financial regulation according to which the regulation of banking risks is justified on account of the market failure which may arise due to the management of these risks. Other theories of financial regulation are presented below for the sake of comprehensiveness.

3.2.2 The Private Interest Theory of Financial Regulation

While British economists have been supportive of regulation in the financial field, mainstream United States literature has become strongly critical of government regulation in virtually every field of economic activity, including financial services (Goodhart 1989: 195-196). Early empirical studies of the effect of regulation generally concluded that regulation had failed to achieve the results that a public interest theory of regulation would have indicated (i.e. to counteract market imperfections), and that the most likely explanation was that the true underlying objectives of regulation were different from the stated objectives (Stigler 1971; Peltzman 1976). This led to the hypothesis that the regulatory process was subject to a process of 'capture' by the industry or interest group which it was initially intended to regulate. Over time, the more restricted capture theory evolved into a general private interest theory of regulation.

In contrast with the public interest theory, the *capture theory* therefore postulates that regulation is the outcome of a struggle between various interest groups, each of which seeks to maximise its own private welfare. This welfare can be expressed in terms of profits for the intermediary, protection at least cost for the consumer, votes for the politician and low or no failure rates amongst intermediaries for supervisors. Thus, even though regulators may start out with good intentions, the capture theory contends that they may ultimately become 'corrupted' in the sense that other objectives may be allowed to influence their judgement. The ultimate danger is that the regulators become 'captured' by the regulated (Hall 1991: 169).

The Chicago school under Stigler and Peltzman have argued that regulation should be viewed as a form of wealth transfer brought about by an essentially political process of maximising effective support for such measures. In such cases, a well-organised cohesive lobby is likely to be the most effective.

The approach emphasising the importance of lobbying on each issue is naturally fashioned on US political circumstances. The political calculus underlying US regulation seems less applicable in other financial systems and specifically the financial systems considered in this study.

Moreover, it appears unfeasible for any supervisory authority to operate effectively without a degree of voluntary co-operation from the supervised. In this sense, regulation always has to be designed to be acceptable to the regulated and a degree of 'capture' by the regulated industry is inevitable in all regulatory systems.

Although emphasising some significant aspects of regulation, the capture theory is far too absolute. Some conflict between regulator and regulatee is inevitable. On the other hand, hostility between the various parties is neither essential to nor desirable for good regulation. Regulatory authorities can only perform their function properly if they understand the position of those whom they regulate, which does not imply being unduly influenced by the regulated.

The essence of the public interest theory of regulation is that regulation can be beneficial if otherwise there would be market failure. It therefore serves to elucidate the benefits of regulation. The capture theory approach to regulation acts as a balance to this by stressing some of the costs and dangers of regulation. The value of the capture theory is that is accentuates the fact that the case for regulation is not always self evident and requires more careful consideration than is sometimes given.

The capture theory (which is essentially a theory of regulatory failure) prompted as many questions as it purported to answer. What was required was a more general theory which could explain how private interests operate in the public domain.

On the basis of public choice analysis there has emerged, particularly in the American literature, an 'economic' theory which can be termed the *private interest* theory of regulation. According to this theory the existence and form of regulation is a response by politicians to the demands of interest groups who will derive benefit from the measure. The theory seeks to provide an explanation not only for regulation which overtly confers benefits on producers but also measures which ostensibly protect more generalised interests, such as consumers or the environment, but which serve to generate profits for the regulated firms or industries.

The main criticism of the private interest theory of regulation is the unrealistic assumption that self-interest motivates the behaviour of all those engaging in politics. Empirical studies, particularly by political scientists, did not always confirm the predictions made by private choice theorists (Lewin 1991).

Neither the capture theory nor the private interest theory explains the large number of deregulatory measures which have been taken in the US and elsewhere in recent years. Consequently, the private interest theory of regulation cannot provide an adequate explanation for the existence of financial regulation.

3.3 The Costs associated with Financial Regulation

There are a number of reasons why regulation is costly (Gowland 1991: 21-27; Goodhart 1995: 446). Most of these costs are difficult to quantify but they may nevertheless be significant.

The first of these costs arises from what is usually termed *moral hazard*. Moral hazard describes those changes in the behaviour of the private sector, which occur in response to some institutional or other change and produce undesirable, counterproductive effects.[30] Regulation, by inducing the private sector to take more risks, may thus lead to a reduction in normal standards of prudence. This may actually increase the dangers that regulation intends to avoid.

Moral hazard certainly seems to be a problem in the case of deposit-taking institutions. In a totally free market, depositors would have to assess the safety of banks, yet in practice, the regulation of these institutions may lead depositors to believe that the bank concerned is safe or that the depositor will be refunded in the event of a bank failure occurring. In one way, this is a benefit since confidence in the stability of banks and the banking sector is a public good which is desirable on market failure grounds. Nevertheless, if depositors place their surplus funds with banks without regard to the risk involved, this will make it easier for badly managed financial institutions to obtain funds.

'Moral hazard' can apply to both parties in a financial transaction. An important strand of academic literature (Di Cagno 1990) shows that banks are likely to react to regulation by increasing the riskiness of their loan portfolios. This is done in order to compensate for the costs of regulation by adding high-yielding and more risky assets to their portfolios.[31] Generally, regulatory requirements may induce economic agents to take higher risks when part of the financial consequences is borne by others.

The second category of regulatory costs is *compliance costs* i.e. the additional costs imposed on banks in order to comply with the regulations.[32] An obvious example is hire purchase and usury regulations which limit the maximum interest rates charged on loans.

---

[30] The classic example of moral hazard is fire insurance: when an individual has insured his house against fire, he/she is likely to become more careless in handling cigarettes and more likely to take risks which might lead to fire.

[31] Moral hazard may affect the behaviour of the deposit-taking institution in various ways. For example a '120 km/h speed limit syndrome' may apply - if there is a speed limit on a road, then some drivers assume that it is safe to drive at that speed without assessing the conditions peculiar to the road that day. Similarly, bank management may believe that if their lending to a certain category of borrower is less than the official limit, it must be safe.

[32] Lomax (1987) has estimated the costs of complying with the Financial Services Act in the UK at between £100 million and £300 million per annum. The American Bankers Association has estimated the annual regulatory costs to the industry at nearly $11 billion, while other estimates exceed $15 billion (Phillips 1993: 6).

The third cost is the *loss of economic welfare* by agents performing fewer transactions than they otherwise would have as a result of the first two types of costs.[33] Both these costs reflect loss of economic efficiency as agents behave in ways other than they would have without regulation.

Goodhart (1995: 440-446) also names the *direct resource costs* of the regulatory system - people, equipment and buildings - which could have been used for other purposes.

Fifth, there are the *direct costs* to the regulated institutions, such as the financing of deposit insurance funds.

Regulation may therefore lessen competition, raise costs and lead to static inefficiency. There is also the possibility that the burden of regulation may direct financial activity to other financial systems. These static costs of regulation may be less important than the *dynamic* costs of regulation, especially if regulation acts as a barrier to change and so preserves an inefficient financial services structure.[34]

A possibility exists that regulation could serve to hinder innovation in financial intermediation, leading to dynamic inefficiency.

Note, however that according to the classical public interest theory, regulation with the aim of achieving economic efficiency is assumed to be virtually without costs. The inference is that although there are no problems with the explanatory value of the public interest theory, it cannot be regarded as a general theory of regulation. At most it can be viewed as an extremely useful instrument in explaining the need for and nature of regulation (Marais 1991: 59).

Because of these costs of regulation, the objectives of regulation need to be defined unambiguously. Where possible the advantages to be gained from regulation should be weighed against the cost thereof. The approach adopted here is that the objective of deposit-taking regulation should be the optimisation of financial risk-management by banks, as it is the most cost-efficient means of attaining the regulatory objectives.

---

[33] A reduction in the volume of transactions in financial markets would not displease some advocates of regulation. A financial transaction may reflect private rather than social gain (a point made by, of all people, Milton Friedman (1969) with the example of a switch from non-interest bearing to interest-bearing government securities). Others might ascribe to the dictum of Keynes (1936) 'that it would be no bad thing if access to both stock markets and casinos were difficult' (for those who cannot afford the potential losses).

[34] On the other hand, a major cause of innovation is the desire to avoid the impact of regulation, and such innovation may convey social as well as private benefits.

3.4 The Rationale of Financial Regulation

> *A 'sound' banker, alas! is not one who foresees dangèr and avoids it, but one who, when he is ruined, is ruined in a conventional and orthodox way along with his fellows, so that no one can really blame him.*
>
> John Maynard Keynes (1883-1946)
> The Consequences to the Banks of the Collapse in Money Values in *Essays in Persuasion*, 1933.

The case for banking regulation, as identified in terms of the public interest theory, rests on the identification of specific conditions within markets which may give rise to market failure. These were said to consist mainly of imperfect information and negative externalities, while imperfect competition is of lesser importance.

Three reasons for regulation are discussed below: stability of the financial system, consumer protection and monetary stability. The rationales of consumer protection and financial stability are in accordance with the public interest theory of financial regulation as restated to incorporate the fact that banks act as mangers of financial risk. Monetary stability, on the other hand, acquires its justification in the monetary rather than the regulatory sphere.

3.4.1 Stability of the Financial System

A primary function of banking regulation is to reduce the probability of financial crises. The question arises: Are periodic banking and financial crises endemic to modern market economies?

Minsky (1975: 6-13), an important student of financial crises, argues that periodic financial crises result from the normal functioning of a mature economy. Financial instability and crises are seen as facts of economic life. Financial instability is analytically viewed as a process in which rapid changes in asset prices occur relative to the prices of current output. Minsky (1975: 6) posits that the standard body of economic theory implies that financial instability is an impossibility:

> *'Before theory became a victim of mathematics and observations were replaced by printouts, economists recognised that financial crises occurred and set their minds to explaining why they took place and their effects on system performance.'*

Minsky's model of financial crises, based on observed events, holds that the internal dynamics of capitalist systems lead to financial structures which are conducive to financial crises. The central bank's responsibility as provider of emergency assistance is to prevent the general fall in asset values caused by the **risky financing policies** of dominating economic units.[35] Another important role of the

[35] Banks play a crucial role in the risky financing policies referred to by Minsky (1975) as it is banks which provide credit to deficit economic units. In the process of granting loans to these units, banks will incur excessive credit risk which may only be exposed when a financial crises occurs. Alternatively, if banks indiscriminately lend funds without regard for credit risk, the availability of credit may prompt economic units to engage in risky ventures which could cause economic instability.

central bank is seen as guiding the evolution of financial systems so that risk is kept at a safe and healthy level. In effect Minsky was advocating the regulation of systemic risk.

Minsky's theory was neglected during the boom of the 1960's and even during the oil and Third World debt crises of the 1980's. However, Minsky's hypothesis cannot be ignored after the financial instability ushered in by the crash of October 1987.[36]

Keen (1995) modelled the insights of the 'financial instability hypothesis' with Goodwin's (1982) limited cycle model which takes into account four factors: the tendency of capitalists to incur debt on the basis of euphoric expectations; the importance of long-term debt; the destabilising influence of income inequality; and the stabilising effect of government. Keen (1995: 633) finds that this very simplified model of capitalist finance confirms Minsky's predictions. Keen (1995: 634) concludes that:

> *'this vision of a capitalist economy with finance requires us to go beyond that habit of mind ….. that Keynes described so well, the excessive reliance on the (stable) recent past as a guide to the future. The chaotic dynamics explored … should warn us against accepting a period of relative tranquillity in a capitalist economy as anything other than a lull before the storm.'*

Barclay *et al* (1978) developed the hypothesis that the process leading towards financial crises is started through 'surplus' banking profits tempting a growing number of new entrants to these activities. He proposes that a cyclical pattern in bank risk assumption is observable. As the fringe financial institutions increasingly exploit the profit opportunities of market niches, more established institutions are tempted to compete in these areas. Eventually competition and the lure of profit attract the more prudent and established banking institutions to take higher risks. But this profitable activity is inherently more risky and problems arise when conditions deteriorate. Established banks are drawn into bad banking in order to rescue their profitability. This results in a kind of Gresham's law of banking, in which bad banking drives out good banking.

Like Minsky above, Barclay is in fact expressing concern about the risk exposure of individual banks and the effect thereof on the financial system as a whole. Interestingly, their analyses provide justification for associating a high degree of competition with a high degree of risk in banking.

---

[36] The stock market crash of 1987 first occurred in the Japanese equities markets and then spread eastwards to New York and eventually to London. Significantly, the nearly uniform drop in equity prices around the world only had a small effect on economic output. It appears that much of the credit should go towards the central banks in industrialised countries, which generally eased their monetary policies to ensure that businesses and consumers did not significantly curtail their spending even though they had suffered huge losses in the market value of their equities. Thus, the financial instability following the 1987 stock market crash did not result in much economic instability (as was the case in the crash of 1929).

No widely accepted theory of financial crises has as yet been formulated. However, the models of Minsky, Barclay and Keen provide some insight into how modern financial crises have developed. It is evident that modern banking crises are not only possible but also potentially damaging to economic welfare. These crises undermine confidence in the financial system and thereby negatively affect economic growth due to the special nature of banks in financial systems.[37]

The potential of a banking crisis[38] has provided one of the strongest justifications for the regulation of banks. As Maisel (1981: 5) puts it:

> *'Without regulation an undue percentage of financial institutions are likely to take excessive risks.'*

Similarly, Llewellyn and Holmes (1991) analyse how deregulation and increased competition are likely to induce competitive strategies that create more balance sheet risk. The consequence of these excessive risks is that bank failures will become more frequent and systemic crises become more likely.

The stability of the banking system is regarded as an essential pre-condition to facilitate economic growth.[39] One of the main tasks of bank regulation is therefore to prevent unstable developments in the financial sector from destabilising activity in other sectors of the economy. An unregulated banking system would be subject to unacceptable 'swings of confidence' (Lewis and Davis 1987: 136).[40] Moreover, because the social costs of failure would exceed the wealth losses that would be borne by depositors, intervention may also be justified on welfare grounds (Santomero and Watson 1977). In essence this argument can be traced to the 'far-reaching' negative externalities referred to by Gardener (1986) and Goodhart (1989). The failure of one bank may throw doubt on the viability of others, and a contagion of panic withdrawals may result.[41]

The challenge faced by central banks in pursuit of financial stability was the focus of a lecture by the then Governor of the Bank of England, Mr. E. A. J. George (1993). He reasons that:

---

[37] As set out in paragraphs 2.3 and 2.4.

[38] This is nothing more than a specific form of market failure.

[39] For a stimulating and alternative view on financial crises see Prywes (1992) who reasons that crises bring needed restructuring to economic systems which have gone awry. Prywes (1992) argues that crises leave the financial systems and markets cleaner, less leveraged, with stronger instruments and more stable markets. Consequently Prywes (1992) favours preventative regulation rather than the rescue of troubled institutions.

[40] *Vide contra* Kareken and Wallace (1978).

[41] *Vide contra* Benston and Kaufman (1996: 691) who reason that the 'failure of even many banks at about the same time would not result in a general economic collapse if depositors redeposited their funds in other banks and these banks kept reserves at about the same ratio to deposits as did the failed banks. There would be no decline in aggregate money or credit'. Such a line of reasoning underestimates the propensity to withdraw money from the entire domestic banking system, or, more importantly the reduction in the value of bank assets which may occur in a general economic collapse.

> *'central banks do not see it as their job to eliminate risks and put the financial system in cotton wool. No doubt the authorities could use their powers to shape the system in that direction. If society wanted a largely risk-free financial system, they could indeed produce one. But this would be only at enormous cost - by constraining financial intermediaries to such an extent that they would be able to provide far fewer of the services to industry and commerce than they do now.*
>
> *Even well short of draconian controls, any intervention by central banks is bound to affect the shape and dynamics of the system. This raises difficult questions about the appropriate balance between risk and stability. We see it as our task to provide a regime in which the users of financial services can benefit from robust competition among financial firms, which will not happen unless each individual firm takes on some public risk. But at the same time, we must ensure that there is public confidence in the monetary system as a whole. In short, lots of small uncertainties must add up to an overall certainty'* (George 1993: 4).

Financial crises and the issues revolving around them make for popular reading. In his book *The Death of Money* the American economist Kurtz (Finansies en Tegniek 1994: 41) writes that money as we know it no longer exists in financial markets. He argues that money has become merely a figure on an electronic screen and that this figure is subject to very rapid change. One of his main conclusions is that the present international financial system has evolved largely because of this fundamental change in the nature of money.[42]

Kurtz's analysis highlights two important and related issues, namely the maintenance of a stable payments system and the added dangers of international instability which, in view of the globalisation of financial markets, is almost instantly transmitted from one country to another. This is but one reason why regulatory authorities across financial systems need to co-ordinate their regulation.

Although previously sharp distinctions between different forms of financial intermediation are increasingly becoming blurred, banks still play a dominant role in the *payments system*. Money has become part of an international network of payment systems that operate 24 hours a day and connect financial institutions and individuals over the entire globe.[43] Modern electronic financial markets require immediate settlement. Should a large institution fail, the contagion effects arising from the payments system would be very large.

What makes a banking system vulnerable to disruption if a bank fails? Bartholomew and Whalen (The Economist 1996(a): 10) have identified four common themes: concentration, homogeneity, information and connections.

---

[42] See also paragraph 5.6 on the Eurocurrency market which is largely free from monetary or other regulatory requirements.

[43] It has been estimated that in New York alone daily electronic payments average $1 900 billion (Finansies en Tegniek 1994: 41).

The greater the *concentration* of a bank's loan portfolio in a single company, industry or country, the greater the chance that it will collapse if a single borrower or group of borrowers defaults. If a bank does fail others may also fail if depositors believe that there is a large degree of *homogeneity* between the failed bank and other banks. If there is sufficient *information* about the finances of the banks available, it will be easier for depositors, creditors and counterparties to assess the risk-profiles of banks. The final factor that determines the probability of a systemic threat is the extent of *connections* between different financial institutions.

The prudential concern over financial stability acquires additional impetus through its *international dimension*. Indeed, international banking involves new and distinct risks which have no counterpart in domestic financial markets, such as foreign exchange risk and country risk.

The possibility that banks may incur losses on their *foreign exchange* business can be broken down into three separate risks: the risk of dealing and taking a position; the risk of losses caused by delinquent employees acting in excess of their authority; and the risk of default by the counterparty in either spot or forward transactions.[44]

According to the BIS, turnover in the foreign exchange market, in which banks are principal players, has reached an estimated $1,2 trillion a day (The Economist 1996(a): 15). Regulators have responded to this risk by imposing upper limits on the foreign exchange exposure of banks, usually with reference to a bank's capital, seen relative to the capital and balance sheet of a particular bank or a country's banking system.

There is also some concern among central banks about the risks to the international financial system that arise from the way in which foreign exchange trades are settled. The risks associated with the foreign exchange settlement process were first highlighted in 1974 with the failure of Bankhaus Herstatt and the more recent cases of Drexel Burnham Lambert (1990), Bank of Commerce and Credit International or BCCI (1991)[45] and Barings (1995)[46]. The latest report by the Basle Committee on

---

[44] The introduction of floating exchange rates in March 1973 markedly increased this risk. The first casualty was the failure of the West German Bankhaus Herstatt in June 1974 and the US Franklin National Bank's downfall in the same year. Herstatt was the largest private bank in West Germany and its failure resulted from foreign exchange losses reportedly in the region of $200 million. To put these losses in perspective, at the end of 1973 Herstatt had an equity base of only $31 million. Many criticisms were levelled at the way this failure was handled and its damaging repercussions on confidence in the international system. Herstatt closed its doors at the end of its business day. Due to differences in time zones - New York was still trading foreign exchange - many banks were caught in the middle of spot transactions. These banks had delivered the foreign currency but had not yet been repaid by Herstatt. By closing Herstatt before dollar settlements for the day had taken place in New York, the Bundesbank exposed a risk of whose existence banks were until then unaware - the interbank credit risk involved in spot foreign exchange operations.

[45] BCCI was founded in 1972 with the objective of financing trade with the Third World. The bank was based in Luxembourg. By the mid-1970's BCCI had gained entry into nearly seventy countries and had more retail branches in the UK than any other foreign bank. The founders of the bank carefully structured the organisation to avoid consolidated supervision in the countries where it was active. The nonbank holding company was established in Luxembourg and subsidiary banks were chartered in countries with well-established secrecy laws: Luxembourg and the Cayman Islands. Nevertheless,

Payment and Settlement Systems identified two general approaches to reduce a bank's foreign exchange settlement exposure: one involving payment cancellation and receipt identification; the other utilising netting[47] (Casson 1996: 2-4). Banks will be able to reduce their settlement risk by ensuring that the payment is made to the intended recipient otherwise it can be cancelled; and by paying only the net amounts due.

Country risk has been defined as 'the possibility that sovereign borrowers of a particular country may be unable or unwilling, and other borrowers unable, to fulfil their foreign obligations for reasons beyond the usual risks which arise in relation to all lending' (Group of Thirty 1982: 6). Country risk must be evaluated relative to the capital resources and assets of an individual institution and the banking system in its entirety.[48]

The key weakness of what has come to be known as the international 'recycling mechanism'[49] is the 'boom or bust' characteristic of banks' lending behaviour (i.e.

---

most managerial decisions were made in London and in Pakistan. Furthermore, separate auditing firms were hired for each bank. As a result, no supervisory authority was in a position to anticipate clearly the bank's downfall until it happened in 1991. Neither Luxembourg nor the Cayman Islands had the resources to oversee BCCI's worldwide operations, and the Bank of England did not want the burden of supervising the global operations of a bank it did not charter. The BCCI affair clearly demonstrated the limitations of international bank supervision when regulatory loopholes are exploited. Although the failure of BCCI inflicted heavy losses on an estimated 530 000 unsophisticated investors around the world (many in less developed countries), the bank's collapse did not destabilise the international financial system as the international institutions that play a critical role in the interbank markets had isolated BCCI because of its doubtful reputation (Herring and Litan 1995: 104-105).

[46] The background to the failure of Barings Bank, the oldest UK merchant bank is covered in the Report of the Board of Banking Supervision Inquiry into the Circumstances of the Collapse of Barings (1995). The Board of Banking Supervision found that: 'Barings' collapse was due to unauthorised and ultimately catastrophic activities of, it appears, one individual (Leeson) that went undetected as a consequence of a failure of management and other internal controls of the most basic kind. Management failed at various levels and in a variety of ways .... to institute a proper system of internal controls, to enforce accountability for all profits, risks and operations, and adequately follow up on a number of warning signals over a prolonged period. Neither the external auditors nor the regulators discovered Leeson's unauthorised activities' (Report of the Board of Banking Supervision Inquiry into the Circumstances of the Collapse of Barings 1995: paragraph 14.1). A week after the failure of Barings the majority of its assets and liabilities were bought by Internationale Nederlanden Groep N.V. (ING), a large Dutch banking group, thereby preventing any systemic repercussions. For a first-hand but inevitably subjective account of how a single futures trader in Singapore brought down one of the oldest British banks by incurring losses of some £890 million, see Leeson with Whitley (1996).

[47] Netting is the process of calculating debits and credits to give a net result. As regards settlement risk, a netting process will result in a bank only being exposed to the net (and not the gross) amount credited to it.

[48] See paragraph 4.2.5.2 for a discussion on the regulatory treatment of country risk.

[49] So termed because the international market for eurocurrency deposits and foreign exchange became to a large extent the vehicle for recycling the new wealth for the oil-producing countries. With the massive rise in the oil price in 1973 international banks found themselves awash with funds to lend. A large volume of lending was directed to lesser developing countries, but effective risk analysis of these countries by banks was often lacking and margins were inevitably narrow. Banks entered the 1980s to face the mounting international debt crisis with inadequate capital bases and low-risk premiums in international lending. See Dale (1982: 73-89). For a more recent discussion of financial crises in emerging markets see Sachs (1996), who concluded that the emerging market contagion of 1995 had mainly 'rational' causes. Countries with overvalued exchange rates, weak banking systems

lending cyclicality). The dangers of excessive country lending are compounded by the propensity of the international credit system to unravel when confidence is shaken. The reasons why this may occur are twofold:

First, the relatively numerous creditors each of which has an incentive to withdraw when a debtor country is in difficulty. Second, there is the phenomenon of 'contagion' in financial markets which may, via its effects on confidence, transmit debt servicing problems from one country to another. Country debtors seem to have the same susceptibility to infectious collapse as do banks in an unregulated environment, the common characteristic being that both are dependent for their continued financial viability on the collective confidence of their creditors / depositors.[50]

What are the regulatory implications of the threats to international financial stability? It is clear that the market cannot always be relied upon to put a prudent ceiling on individual country indebtedness and thereby country risk; nor to absorb severe shocks to the system. One important operational difference between domestic financial systems and the international banking system is that the latter does not readily offer emergency liquidity assistance on an international basis. The threat of an international financial collapse has led to pressure for such assistance. It is argued that governments in conjunction with international institutions should initially support commercial banks to overcome the immediate global financing and payment problems (Dean and Giddy 1981). Countries may collectively mount such assistance with the support of the International Monetary Fund.[51]

Llewellyn (1995(b)) argues that the next phase in the global banking industry is likely to be one of more moderate growth of balance sheet positions and a relative decline in some aspects of the role of banks in the financial systems, especially through the capital market but also in regard to non-bank financial institutions and non-financial banking institutions. The continued overwhelming pressure will be increased competition. This trend will be accompanied by an ever growing focus on the management of financial risks by banks and will require a comparable growth in regulatory sophistication.

The issues involved in the regulation of non-bank financial services are different to those applicable to banking. The systemic risk is considerably less evident (and often does not exist at all) compared with banking (Mayer 1993). Contagion is less likely to occur and the potential disruption of the payment system does not arise. The concern with financial stability therefore goes a long way in explaining the existence

---

and low reserves were more likely to suffer speculative attacks. Interestingly, other economic factors such as the size of a country's current account deficit or the extent of previous capital inflows did not seem to matter.

[50] If caused by an unfounded rumour the conditions may therefore be such that international financial contagion may be described as a progression *from the random walk through the bank run to capital flight.*

[51] Interestingly, the USA recently (1995) lent considerable support to the Mexican financial system in the wake of the fall of the Peso and the flight of capital from Mexico. It was feared that the 'tequila effect' would adversely impact on US banks.

of extensive regulations covering the risk-management activities of deposit-taking institutions.

Moreover, the nature of the contracts (i.e. deposits) entered into by banks differs from that of contracts entered into with other non-financial institutions. This brings to the fore the issue of consumer protection which is discussed below.

3.4.2 Consumer Protection

Apart from the systemic interest, regulators may also be concerned with the protection of small and by implication less sophisticated investors. As defined, banks accept deposits **from the general public as a regular feature of their business.** It was argued above that because banks serve as major depositories for the public / household sector's savings, banking regulation should aim at some degree of protection for these savers. Such concerns are normally linked to doubts about the availability of low cost information available to investors (Fama 1980).

Regulation in this regard therefore usually also involves the imposition of minimum disclosure requirements. However, this may be insufficient for a proper risk assessment of a bank. Even in the presence of strict disclosure requirements, published reports may still lack transparency - not only for the unsophisticated investor. Problem areas include: hidden reserves and provisions,[52] off-balance sheet risks and the principles applicable to balance-sheet consolidation.

Two main arguments in favour of protection for the consumer can be advanced (Baltensperger and Dermine 1990: 26). The first is that the evaluation of the financial position of banks is a costly exercise which has the characteristics of a public good. Once it has been produced, it is available to consumers at a very low transfer cost. As such the monitoring and evaluation of banks need not be undertaken by each depositor but could be delegated to a public agency or private rating firm.

Second, small depositors may still find the cost of interpreting the evaluation high. Two alternatives could be developed. The first is to introduce a system of deposit insurance.[53] The second is to create risk-free banks, i.e. intermediaries investing all deposits in almost risk-free assets. Depositors would then have a choice between banks offering a higher but more risky return and those providing quasi risk-free deposit facilities at lower returns.

---

[52] Revell (1986) provides a historical perspective on hidden reserves and the influence of hidden reserves on requirements of capital adequacy. He finds that the perception still exists that the real position of a bank is and should be a little better than the position as certified by auditors. He concludes that although it will never be possible to eliminate hidden reserves entirely, effort should be made to restrict these as far as possible.

[53] However, deposit insurance *per se* is no panacea. During the 1980s roughly 1200 banks representing $130 billion in bank assets failed in the USA and required the assistance and resources of the Federal Deposit Insurance Corporation's Insurance Fund to rescue and restructure troubled commercial banks. After a peak of $18 billion in the mid 1980s the absolute size of the fund declined sharply to the extent that it faced insolvency with obvious implications for the American taxpayer (Bryan 1991: 82).

Another aspect of consumer protection revolves around the issue of *consumer education*. The Jacobs Committee (Committee of Investigation into the Promotion of Equal Competition for Funds in Financial Markets in South Africa) argues that consumer involvement should be encouraged by 'much more and meaningful education and information exercises' and simplified disclosure, highlighting who runs the risk (Republic of South Africa 1992: 71).

Although generally intended for unsophisticated communities, consumer education may also be helpful to combat the popular perception amongst many depositors that they will always and somehow be 'bailed out'. This approach (consumer education) would increase private sector incentives for monitoring risk and reduce the perception that the government generally underwrites the soundness of banks.

The Reserve Bank of New Zealand have made a number of innovative proposals in regard to the protection of depositors. They are (Reserve Bank of New Zealand 1993: 2-10):

- strengthened public disclosure requirements for registered banks;
- mandatory credit rating of banks; and
- reduced role for prudential rules.

In effect it is proposed that the use of the existing statutory returns as a routine means of monitoring banks be discontinued. Rather, monitoring would be primarily based on banks' publicly disclosed financial statements and other publicly available information. Registered banks would be required to physically display a credit rating in a manner which enables depositors and other creditors to be readily informed of their rating. These requirements would serve *inter alia* the purposes of enhancing market disciplines by facilitating better market scrutiny of a bank and at the same time increasing the ability of creditors and others to protect their own interests by providing them with more meaningful information on a bank's affairs. The central bank would retain its emergency assistance role and powers, but the market would in essence be the true regulator.

The advantage of such an approach is that informed albeit relatively unsophisticated consumers, aided by reliable but easily understood credit ratings, could play a crucial role in protecting their own interests. However, explicit deposit protection and emergency assistance measures may still be provided, either as a means of compensating 'small' depositors for any losses incurred as a result of individual bank failures occurring despite "market" regulation or in order to stabilise the system in the face of isolated bank collapses.

Clearly then, the concern about consumer protection cannot be divorced from the concern about the stability of the financial system. These objectives interrelate in several ways (Baltensperger and Dermine 1981: 72-73). For example, one of the basic objectives of protective regulation is the creation of confidence in the banking system through the reduction of overall risk. However this will also have a beneficial influence on the probability of systemic crises. Contrariwise, protective measures involve the danger of moral hazard which may have adverse effects on the riskiness

of banks. Clearly, the common denominating factor is the influence that financial regulation has on the management of risk by banks.

3.4.3 Monetary Stability

Monetary stability is a subset of the overall goal of financial stability. Monetary stability relates to three inter-related functions of a central bank - implementation of monetary policy, supervision of banks and overseeing of the payments system (Van Greuning 1993: 55).

However, as Van Greuning (1993: 61-62) reasons, bank supervision must be independent from monetary policy, because the considerations surrounding the two regulatory functions differ. Supervision concentrates on a micro function with regard to individual institutions, namely 'risk-management', whereas monetary policy deals with the macro function of evaluating the impact of monetary measures in the industry as a whole. It is maintained that the latter should be exercised through market-orientated means of achieving monetary stability. This issue will be advanced in paragraph 4.4 which will analyse the remaining component of direct monetary requirements from a prudential perspective, arguing that any such requirements that remain are inappropriate as these may actually increase financial risk.

3.5 The Evolution of Financial Regulation

Risk-management in banking is not a new concept. Banks have always placed limits on particular aspects of their activities, such as exposures to individual counterparties. However, this approach has been somewhat unstructured. The new approach to financial regulation emphasises risk-management as a more encompassing and scientific concept whereby the various types of risk across the business as a whole are systematically identified, measured, monitored and controlled. What is also new is the interests of regulators in how these advances in risk-management can be incorporated in supervisory techniques.

Carse (1996: 26-29) identifies three main stages in the risk-management evolutionary process, namely: direct regulation, capital-based supervision and risk-based supervision.

Direct regulation

The direct regulation stage is characteristic of financial systems in which banks are subject to tight official control. In this environment, the banks are regulated in terms of the interest rates they can pay and demand, the types of lending and the permitted range of activities that can be undertaken, the permitted growth in credit extensions and the balance sheet, and the ability to establish new branches and subsidiaries both domestically and abroad. In such a system, banks have only a limited incentive to pay close attention to risk.

The role of the supervisor is also limited as far as risk-assessment is concerned. The main regulatory preoccupation is ensuring that banks are observing the various rules and regulations that control their activities.

Capital-based supervision

In the second stage of evolution, direct controls on the activities of banks are relaxed as part of a more market-oriented approach towards the economy. This relaxation involves the lifting of interest rate and exchange controls and the liberalisation of lending and business restrictions. Banks are also given more freedom to internationalise their activities. Competition is further encouraged by permitting the entry of new banks, including foreign banks. This deregulation brings large benefits to the economy in terms of the ability of banks to mobilise savings and channel these savings into commercially viable projects. On the other hand, increased competition and greater commercial freedom may encourage the banks to assume higher risks. In the phase when banks were strictly regulated they were unlikely to have developed the banking skills and, particularly, the expertise in credit assessment to manage these risks prudently.

Consequently, deregulatory measures must be accompanied by increased and more effective supervision to avoid competitive excesses that may result in financial instability. In a deregulated environment, supervision must be indirect in the sense

that it should allow banks to rely on their own commercial judgement in accepting risk but within a supervisory framework of rules and guidelines. A particular emphasis in this approach is ensuring that banks have enough capital to support the risks on their balance sheets.

Risk-based supervision

A supervisory approach based on forcing compliance with a prescribed set of balance sheet ratios is no longer effective for regulating the risk-management of financial institutions, however refined the definitions and calculations might be. Moreover, while adequate capital is essential to protect a bank against losses, it is clearly preferable if the losses do not arise in the first place. This recognition has led to the third stage in the evolution of supervision in which there is an increased emphasis on prevention rather than cure. The importance of capital adequacy is not neglected, but there is more focus on identifying the quantity of the risk within a bank and determining the quality of the bank's systems for managing the risk.

According to Carse (1996: 28) the key elements of this new approach are:

- the systematic identification and classification of the various types of risks to which banks are subject;
- ensuring that banks have adequate systems to measure, monitor, and control risk across the whole range of their activities;
- giving banks incentives to improve their risk-management techniques by looking for market-based solutions to supervisory problems;
- ensuring that adequate capital is held against risks in banks' portfolios, both on- and off-balance sheet; and
- supplementing the discipline excercised by the supervisor with that excercised by the market by encouraging more public disclosure by banks.

The principles applicable to financial regulation - a topic next discussed - should be adapted to conform to the new approach of risk-based supervision.

3.6 Principles of Financial Regulation

Once the case for and approach to financial regulation has been accepted, one has to establish a set of principles by which to guide and judge regulatory policy. The principles underlying the process of regulation should be deduced from the rationale and objectives of regulation. No definite statement of principles commanding unanimous support has as yet emerged.

The Campbell Committee, in its deliberations on the Australian financial system, which culminated in the publication of a final report in 1981 (Australian Government Publishing Service 1981), was one body to identify such principles. The report embraced the following convictions:

- financial institutions should be allowed to fail;
- a liquidity safety net should be available to financial intermediaries;
- investors should receive reasonable protection against fraud and malpractice;
- there should be a 'fair' and well-informed market in securities;
- entry requirements should be concerned solely with the issue of depositor protection;
- prudential requirements should be applied in a flexible manner - leaving intermediaries with maximum freedom to adjust to changing circumstances;
- should aim at ensuring competitive neutrality amongst intermediaries; and
- regulations should not impair the provision of a reasonably full spectrum of risk-return investment opportunities, including a 'safety haven' for the small unsophisticated investor.

In a similar fashion, the Jacobs Committee, in its investigation into the promotion of equal competition for funds in financial markets in South Africa specified the following guiding principles (Republic of South Africa 1992: 50-51):

- proper disclosure in published financial statements in terms of current market value;
- practitionary based regulatory arrangements - the regulator must consult with the regulated;
- the use of explicit cost-benefit analyses;
- competitive neutrality between financial intermediaries;
- explicit co-ordination between regulatory authorities, combining functional and institutional regulation;
- maximum competition in the market;
- timeous action by regulators, a delay in action being taken generally increases the risk and possible loss to the investor / depositor;
- each regulatory arrangement must be related to specific objectives - this implies that information requested by regulators must be aimed at the management of specific risks;
- regulators must be flexible - they must be capable of adapting their information requirements and regulatory techniques when financial markets change fundamentally; and

- the regulator should act as a consultant by chairing meetings or acting as a referee.

Most of these principles can be divided into broader categories. Llewellyn (1992: 246-264) identifies five broad categories. efficiency-related principles, stability-related principles, conflict-conciliatory principles, principles related to the regulatory structure and general principles. The Campbell Committee stresses the following considerations: efficiency, diversity of choice, competitive neutrality, stability and social objectives. The taxonomy adopted here is intended as a selective synthesis of the most important elements of both the above approaches. Four categories are considered: efficiency, stability; competitive neutrality and social objectives.

3.6.1 Efficiency

In discussions on the efficiency of the financial system, the following aspects are usually considered (Australian Government Publishing Service 1981): (a) 'allocative efficiency', or the extent to which savings flow to the investment opportunities offering the highest risk-adjusted rates of return; (b) 'operational efficiency', or the extent to which real resources are consumed during the savings transfer process; (c) 'dynamic efficiency', namely the ability of the financial system to adapt to the changing needs of the users of the financial system.

Tobin (1984) adopts a more extensive approach, identifying what he terms 'information arbitrage efficiency', 'fundamental valuation efficiency', 'full insurance efficiency' and 'functional efficiency'. 'Information arbitrage efficiency' occurs when, on average, it is impossible to gain from trading on the basis of generally available public information. 'Fundamental valuation efficiency' arises when the market valuation of an asset accurately reflects the value of the future payment to which the asset gives title, i.e. if the price of the asset is based on 'rational expectation' of those payments. 'Full insurance efficiency' is said to exist when economic agents are able to 'insure for themselves deliveries of goods and services in all future contingencies, either by surrendering some of their own resources now or by contracting to deliver them in specified future contingencies'.[54] Finally, 'functional efficiency' is concerned with economic issues such as the ability of the system to provide opportunities for the diversification of risks and for the allocation of risks to those willing to bear them, the extent to which the full range of insurance services described above is provided, and the 'success' with which transactions and payments mechanisms are provided and savings are allocated to their most socially productive uses.

The principle of efficiency is based on the conviction that financial regulation may have adverse effects on efficient financial intermediation. For instance, excessive attention to depositor protection imposes costs on market participants and may even restrict the options available to investors. A practical example is the South African stokvel concept. It is argued that excessive formal regulation would burden stokvels to an extent that is excessive relative to the needs of the relatively unsophisticated

[54] This is based on the Arrow-Debreu concept of efficiency (Arrow and Debreu 1954).

nature of these operations.[55] Protective measures should therefore be based on explicit recognition of efficiency and cost considerations.

Apart from the possible distorting effects of regulation itself, the two factors most likely to impair the efficient functioning of the financial system are inadequate competition and imperfect information and knowledge (Australian Government Printing Service 1981: 2). Effective competition is important for the efficient operation of the financial system. The maximum attainable level of competition requires freedom of entry into the financial services industry as well as relative freedom of choice regarding the financial services that any market participant chooses to provide. This implies freedom of entry to foreign participants as well as unrestricted access by local market participants to global financial markets (Llewellyn 1992: 247). Adequate information should be available to assist investors and depositors in assessing the risks and intended returns of various financial assets. This means that the benefits to be gained by having adequate information to gauge the risk-profile of a bank are usually considered to outweigh the costs of collection of such information and compliance.

3.6.2 Stability

One of the prime regulatory aims is the promotion of financial stability, which is regarded as being of vital importance to the stability of the economic system as a whole.[56] The system is not able to function efficiently unless investors have confidence in the solvency of financial institutions (individually and as a group) and in the stability of financial markets overall. Special importance is attached to the maintenance of the *payments mechanism*, because of the integral role it plays in facilitating economic activity.

The attributes of stability can also be applied to the principles of financial regulation. Stability-related principles should contribute to the promotion of stability in the financial system by ensuring the safety and soundness of the system. The most important principle in this context should be the optimisation of the quality and effectiveness of financial *risk-management* by banks and other financial institutions. Regulatory authorities should impose acceptable minimum standards to be observed in respect of risk-management. Another feature that should enhance financial stability is the introduction of 'fit and proper' standards for participants.

Llewellyn in Falkena (1994: 4) identifies three stability-related principles:

- a proper assessment and management of risks;
- the use of regulatory requirements based on current market values rather than historic values; and
- a willingness by the regulators to take timely action.

---

[55] See paragraph 9.2.1.1 for a discussion of the issues.

[56] See paragraph 3.4.1.

Developments threatening the stability of the financial system should be dealt with expeditiously. This entails that regulatory authorities should take the necessary corrective action whenever actual or potential market deficiencies are detected. Postponing action could cause an accumulation of adverse effects and even result in domino-style contagion (Llewellyn 1992: 247-248). In practice the action taken by authorities will be largely influenced by the size of the institution.

Nevertheless, it is in the interests of a competitive and efficient market that individual institutions be allowed to fail, except where there are strong reasons for believing that stability of the system would be impaired. The failure of a single institution is not necessarily accompanied by widespread instability. Failure therefore serves a useful purpose in providing an incentive for good management (Australian Government Printing Service 1981: 285-286).

3.6.3 Competitive Neutrality

Competitive neutrality can be defined as 'a situation in which no party to a financial transaction would enjoy a competitive advantage due to regulation' (Llewellyn 1992: 247). The principle embodies the desire to ensure that regulations cause minimal disturbances to the competitive balance existing between financial intermediaries. Competitively neutral financial regulation involves the creation of a 'level playing field' in financial markets and between financial institutions.

There are two fundamentally different frames of reference for the analysis and hence regulation of financial intermediaries. One is the *institutional* perspective which assumes as given the existing institutional structure of financial intermediaries, and the other is the *functional* perspective which assumes as given the economic activities performed by the financial intermediaries.[57] In practice the creation of a level playing field requires the avoidance of functional or institutional discrimination against intermediaries.

The creation of a level playing field raises especially difficult conceptual and practical problems. The Campbell Committee identified three possible approaches (Australian Government Printing Service 1981: 4):

- every financial intermediary could be subject to the same financial regulation;
- each class of intermediary could be subject to different regulation, but with the balance of costs and benefits being the same across all intermediaries; and
- functionally similar operations could be subject to similar regulation.

Given the wide variety of intermediation activities, the first approach is clearly not feasible. The second 'balancing act' approach involves two fundamental problems. First, it is doubtful if such an approach can ever, in practice, achieve competitive neutrality, especially in areas where entry is restricted and competition is not

[57] For a discussion of the functional conceptual framework for analysing the dynamics of institutional changes in financial intermediation see Merton (1995: 23-41)

effective. Second, even if such a balance is achieved, regulation may have indirect effects on the efficiency of the system.[58]

The Campbell Committee therefore suggested that, in principle, the best way of achieving competitive neutrality is by a *functional* approach - a group of intermediaries performing a particular activity should be subject to comparable regulation, with due regard to the differing characteristics of their assets and general perceptions of risk.[59]

The main reasons for the regulation of financial institutions are consumer protection and systemic stability. Llewellyn (1995(a): 212) argues that regulation with the aim of protecting financial consumers is more appropriately conducted on a functional basis so that consumers are afforded the same degree of protection of each service irrespective of the type of institution providing it. Llewellyn (1995(a): 212) also considers functional regulation as more likely to ensure competitive neutrality between different types of institutions providing the same service. However, as "it is institutions and not functions which become bankrupt" (Llewellyn in Falkena 1994: 5), a different type of regulation is required for purposes of safety and soundness.

The Jacobs Committee acknowledged that perfect neutrality between financial institutions is not possible but rejected the view held by the Campbell Committee that only financial functions and not financial institutions should be regulated. The Jacobs Committee argued that when different institutions compete in the same markets for similar objectives, then the way in which they are regulated must promote competitive neutrality as far as possible. The implication is that the principle of competitive neutrality requires one to take an overall view of, or 'holistic approach' to the financial services industry (Republic of South Africa 1992: 45). Regulation should therefore *combine functional with institutional regulation*.

3.6.4 Social Objectives

Government intervention in pursuit of social objectives may aim to (Australian Government Printing Service 1981: 6-7):

- assist particular sectors in the community;
- influence the ownership structure of financial institutions; and
- alter savings behaviour.

---

[58] For instance, portfolio restrictions may reduce the allocative efficiency of the system.

[59] The Campbell Committee conceded that the 'drawing of lines' around financial activities is not easy; however, it maintained that 'freedom of entry would assist in ensuring that, in the long run, there is a balance of costs and benefits across activities, and that users of financial services receive neutral treatment' (Australian Government Printing Service 1981: 5). The Campbell Committee concluded that 'competitive neutrality and efficiency considerations would best be served by regulating intermediaries undertaking similar lending activities in a consistent and comparable manner, i.e. by a functional approach to regulation, though having due regard for 'differences in the risks particular to the operations of different intermediaries' (Australian Government Printing Service 1981: 289).

However, financial regulation should be restricted to a narrow range of objectives. It should not be employed as a means of achieving the wider economic, sectoral or social objectives of the state. This is so for three crucial reasons (Llewellyn 1992: 246). First, regulation of financial institutions and markets is not the most efficient way of securing wider social objectives, as such objectives are assumed to be best achieved by fiscal policy. Second, the more the objectives are widened, the greater the complexity of regulations and the potential for conflicts. Third, these wider objectives are the responsibility of the political rather than the regulatory authorities. The objectives of financial regulation should therefore not be political issues. Consequently, it is economically undesirable that social principles should guide financial regulation. This aspect of financial regulation may become a contentious issue in the South African financial system.

3.7 Summary and Conclusion

Regulation can be viewed as any means of direct intervention in the activities of banks. The appropriate role of bank regulation, or even whether banks should be regulated at all, is a matter of controversy. The strongest theoretical support in favour of financial regulation is to be found in the public interest theory, which sees a role for regulation to correct market imperfections. In the case of banking, two facets of market imperfections are significant, namely the negative externalities which arise in the case of bank failures and the informational deficiencies on which banking consumers base their decisions. Examples of other, less applicable forms of market imperfections are natural monopolies and imperfect competition.

The risk-management approach to deposit-taking financial intermediation is compatible with the public interest theory of regulation as it is excessive risk taking by banks which leads to bank failure (and hence to negative externalities); and due to the informational asymmetries which exist between the actual risk-profile of a bank and the risk as perceived by depositors. Hence, market failure can occur when banks take excessive risks.

It should be recognised that the public interest theory is not without flaws. The private interest theory (which has its origin in US anti-regulatory sentiment) has highlighted that there are also significant costs to regulation - a facet of regulation not recognised in the classical public interest theory. The capture theory, in particular, stresses the danger that regulators may be captured by the regulated.

The main costs of regulation are moral hazard, compliance costs, loss of economic welfare, direct resource costs, direct costs and dynamic costs. Many of the regulatory costs are not directly quantifiable but may nevertheless be large. It is therefore important that regulators clearly define the objectives of regulation and approach the attainment of these benefits in a cost-benefit paradigm. The optimisation of financial risk-management by banks is the most appropriate means of achieving regulatory objectives at the lowest cost.

The objectives of financial regulation should be twofold, namely ensuring financial stability and consumer protection. The objective of a stable financial system can be traced back to the negative externalities of the public interest theory as applied to banks. In the absence of regulation banks are more likely to take excessive risks which are bound to increase the probability of bank failures and thereby augment systemic risk. Modern banking crises are possible because of excessive risk exposure and such crises are potentially damaging to economic welfare. The challenge to the regulator is to achieve an appropriate balance between overall risk and stability.

An important issue related to financial crises is the contagion effects arising from the payment system, including the international dimension thereof. International financial stability is hampered by the absence of international emergency assistance.

Banks accept deposits from the general public as a regular feature of their business, hence regulators are also concerned with the protection of small and unsophisticated depositors. Protective regulation usually involves strict disclosure requirements, supplemented by explicit deposit protection schemes and emergency assistance facilities by central banks. Consumer education should play an important role in raising the risk-awareness of depositors.

The objective of consumer protection is linked to the information problems identified by the public interest theory. Banks receive deposits from the general public who may be unable to fathom the risk exposure of banks due to inadequate disclosure. The public may simply not be able to interpret the data or the cost of interpretation may be too high.

The research problem - which holds that risk-management is inherent to banking activity and that banking regulation should consist of the supervision of various banking risks - is consistent with the 'financial stability' and 'consumer protection' rationale of financial regulation. Only through adequate management of and control over banking risks can these objectives be attained.

Concerns with monetary stability stem from the belief that banks can cause undesirable instability within the monetary and financial system. It is generally accepted that the costs of direct 'non market-orientated' monetary policy instruments are greater their benefits. Remaining direct monetary requirements are therefore deemed inappropriate, both from a monetary and risk-management perspective.

Monetary stability is obviously related to the overall objective of financial stability. However, the regulation of the risk-management activities of banks is divorced from the considerations relating to monetary policy.

At the risk of simplification it is possible to identify three stages in the evolution of financial regulation, namely direct regulation, capital-based supervision and risk-based supervision. Risk-based supervision is an embracing and scientific concept whereby the financial risks across all banking activities are systematically managed.

Having accepted that there is a prima facie case in favour of banking regulation, it is necessary to formulate the principles which guide regulatory policy. These principles should emanate from the rationale of regulation - namely the optimisation of risk-management by banks.

There is no generally accepted group of principles to guide and judge financial regulation. Four categories of principles were discussed: efficiency, stability, competitive neutrality and social objectives. The principle of efficiency seeks to balance the costs and benefits of regulation. Stability-related principles should ensure the safety and soundness of the financial system. Competitive neutrality requires that regulations cause minimal disturbances to the competitive balance between financial intermediaries. Social objectives should, however, not guide financial regulation.

CHAPTER 4

COMPONENTS OF FINANCIAL REGULATION

4.1 Introduction

A study in the field of financial regulation as conducted here, necessitates the identification of components of regulation that facilitate both comparison and analysis. The following section is based on a number of such components that has been discussed in economic literature (Dale 1982; Baltensperger and Dermine 1987, Hall 1987; OECD 1989 and Polizatto 1990). These are presented within an original framework that has been developed in accordance with the theoretical rationale of financial regulation, namely financial stability and consumer protection.

The comparative section of this study contains a detailed description of each selected national financial system, with reference to these components. The general and risk-related considerations underlying these components are outlined in this Chapter.

The purpose of this Chapter, which remains theoretical in content, is to illustrate that each component of financial regulation relates to the various risks which banks manage in the course of their activities. Accordingly, this Chapter demonstrates the theoretical application of risk-limitation and risk-management by prudential authorities; as well as the nature of the remedial action taken if excessive risk-taking leads to the financial distress of a bank.

The Chapter also includes a section on direct monetary requirements, which are argued to be unnecessary for the attainment of monetary stability (as more appropriate market-orientated measures are available) and are unwarranted from a prudential perspective (as these measures may actually increase financial risk).

4.2 Prudential Regulation

Prudential or preventative regulation encompasses those requirements instituted by regulatory authorities to ensure that the risk-exposure of deposit-taking institutions are kept within acceptable bounds in order to reduce the risk of bank failure. The risk-management activities of banks logically commence at entry level while the extent to which banks may engage in risk-taking is dependent on the scope of permissible business activities permitted by regulators. Prudential regulation also consist of requirements relating to the disclosure of risk, adequate capital to support risk-management activities as well as explicit risk-asset limits. The foregoing main components of preventative regulation are discussed below.

4.2.1 Entry Requirements

The regulation of banks begins at the market entry stage. Control of market entry usually takes the form of a *licensing* practice. It is also influenced by the authorisation procedures regarding *foreign bank entry.* Entry requirements are often justified on the grounds of risk-reduction and hence stability and depositor protection. This also involves requirements relating to banking experience and expertise. In each case these assumed benefits must be weighed against the likely costs in terms of competition and efficiency.

4.2.1.1 Licensing and Ownership Control

The power to grant licences provides the possibility of exercising preventative action against the entry of institutions whose activities are deemed likely not to be in the interests of depositors and the soundness of the financial system. This type of regulation is a method of formal control in every financial system, although the extent and modalities thereof vary considerably from system to system. The range of authorisation regulation reflects different attitudes towards the implications of free entry into banking activities, based on views related to the advantages and costs of competition in the financial services industry.

Before banks can be authorised, they must normally satisfy various requirements. These typically include a reputable 'fit and proper' management and a minimum amount of paid-up capital. In general, regulators retain the ability to screen owners and the management of banks in order to prevent individuals lacking professional qualifications, experience, financial support and sound ethical standards from obtaining a banking license. This applies both in the case of *de novo* entry as well as in the acquisition of an existing institution. As a formal check of adherence to law and of the professional reputation of prospective management, licensing may therefore be seen as an obvious and unobjectionable part of any prudential policy.

However, this form of admission procedure must be clearly distinguished from 'real' entry controls based on the demonstration of economic 'need' for additional deposit-taking facilities, i.e. a 'public interest' criterion. The objective of this kind of regulation, which usually results from fear of 'overbanking' under unregulated entry, is to restrain

undesirable competition and affect market structure by protecting existing banks and their profitability.[60]

The negative consequences of these types of entry controls are that they confer monopoly rents to existing financial institutions and may lead to corresponding inefficiencies, which are well-known from general economic analysis. In particular, they may result in a tendency to prevent bank failures from occurring by shielding existing banks, regardless of how inefficient they may be, from competition by new and potentially more efficient banks. In the long-run the objective of establishing a safe and sound financial system is not achieved by restraining banking competition in this way (Baltensperger and Dermine 1987: 83).

From a prudential perspective, licensing concerns should therefore relate to the soundness of new institutions (i.e. whether they will survive) and their capacity to make a positive contribution to the financial system, rather than to tests based on economic needs. If the authorities wish to restrict entry for reasons of stability, entry requirements should (Australian Government Publishing Service 1981: 297):

- be simple and straightforward;
- be publicly available; and
- minimise discretionary judgements as to the optimum number of banks.

In line with the general tendency towards market-orientation, the emphasis on this regulatory measure has decreased, with growing acceptance that competition is basically healthy and as appropriate in banking as in other areas. This has led to increased reliance on other methods of regulation.

4.2.1.2 Foreign bank entry

Foreign banks wishing to enter domestic markets may be faced with regulatory requirements differing from those applicable to domestic institutions. Entry of foreign-owned banks may be limited to **subsidiaries** on the grounds that domestically incorporated and legally independent entities can be more effectively regulated by the host authority. In contrast, other authorities may prefer the establishment of **branches** as these can be considered to enjoy the full support of the integrated group to which it belongs. In a number of countries it is the practice to request letters of comfort from foreign banks seeking to establish local subsidiaries. Countries may prefer to protect domestic banks from foreign competition, but as argued above this is not economicly efficient.

The Basle Concordat sets out the principle that host authorities should discourage or prevent the establishment of foreign banking operations whose parent institutions are not adequately supervised. Alternatively, the domestic host regulators may impose specific conditions governing the conduct of such establishments. The Basle Committee on Banking Regulations and Supervisory Practices has also developed a

[60] See for instance Bhatacharya (1982) who discusses how appropriate combinations of entry controls and interest rate ceilings can limit the probability of bank failure but leads to economic inefficiency.

number of general principles which should govern the examination of applications for entry by foreign institutions. These procedures aim at ensuring that the host authorities are satisfied with the status of the applicant, the standing of its parent institutions and the extent to which the latter is properly supervised (OECD 1987: 49).

In general, policy attitudes towards foreign bank entry and the physical presence of domestic banks in foreign financial markets have become more liberal over time. Such change was motivated by the desire of domestic authorities to put their banks in a position to compete in rapidly expanding global markets. The banks that are more likely to enter foreign markets are those with a large home base and those engaging in foreign trade and investment in the countries concerned (Goldberg 1993: 53-71).

Whilst regulatory provisions regarding the establishment of a foreign bank presence - in particular licensing procedures - have been scaled down in importance, this should be accompanied by a stricter application of prudential regulation designed to ensure the maintenance of high banking standards and appropriate risk-management.

4.2.2 Permissible Business Activities

> *Risk varies inversely with knowledge*
> Irving Fisher (1867-1947) in The Theory of Interest (1930)

Important differences between various countries exist with regard to the regulation of banks' permissible business activities. There is no generally accepted view as to what legitimate banking activity is. This is due to historical differences in approaches to the structural regulation of banking and differences in the perception of the relative importance of a number of factors which may influence the safety and soundness of the banking system. In addition, regulations of this type may involve both prudential considerations and other non-prudential concerns such as potential conflicts of interest or undue concentrations of economic power.

The most basic legal separation of business activities is that made between commercial and investment banking. Deposit-taking activities can also be separated from other areas of finance and business. Restrictions are also often imposed on banks' investment in property and also on equity investments in non-bank entities.

4.2.2.1 Scope of Banking Activity

Limitations on the scope of *permissible business activities* generally reflect three broad categories of concern: conflicts of interest, safety and soundness, and the specialised character of certain activities (OECD 1987: 58).

The justification for the legal separation of commercial and investment banking is the perception that banks' involvement in underwriting as well as in investment business may give rise to serious conflicts of interest. In particular, the concern exists that the wish to preserve customer relationships might induce banks to underwrite and

distribute high risk stocks, or to overlend to underwriting clients, thereby impairing the safety of the underwriting institution.[61]

In the strict sense, the issue of 'conflicts of interest' is not a prudential consideration unless it adversely affects the risk exposure of the institution(s) involved. Although, the potential for conflicts of interest between commercial and investment banking cannot be denied, the attention should rather be focused on the appropriate remedies. It is doubted whether a formal legal separation serves this objective most efficiently.[62] Instead, other methods such as (internal and external) compliance procedures (which are used in many financial systems that tolerate universal banking) have proven to be more flexible. To the extent that conflicts of interest may increase the risk exposure of universally orientated institutions, these should be incorporated in the assessment of risk by regulators. This can be done by requiring higher capital adequacy requirements from institutions engaged in a larger number of activities.

Restraints on the extent to which banks can directly engage in *other areas of finance* (such as insurance services, leasing and factoring) are also frequently motivated by prudential and regulatory considerations. In particular, regulators have been concerned about the availability of expertise in highly specialised activities which differ in both concept and approach from 'normal' banking. It is reasoned that, in view of their intrinsic high riskiness, certain financial activities should be kept separate from the banking entity and should be carried out only through specialised subsidiaries or affiliates.

Separation of this nature can facilitate supervision and regulation if these practices are suited to the specific characteristics of the subsidiary. However, such a division does not necessarily insulate the parent from the risks incurred by their subsidiaries. Both markets and regulators (by means of consolidated supervision) tend to assess the standing of a banking institution as a whole. Consequently, regulations of this nature may not reduce the risk of the particular institution nor of the greater financial system.

---

[61] Experiences of this nature in the late twenties and early thirties in the United States led to the introduction of the Glass-Steagall Act (1933) which severely restricted the activities of domestic banks. In the 1980's the Federal Reserve, which is charged with overseeing the US banking system progressively loosened the Glass-Steagall restictions. In 1987 J.P. Morgan, a commercial bank found and exploited a loophole in section 20 of the Act which states that a bank may not be affiliated with any firm 'engaged principally' in underwriting and dealing in securities. Two other big banks, Bankers Trust and Citicorp, quickly followed suit. Over time the Federal Reserve came to sanction these 'Section 20 affiliates' on condition that they earned no more than 5 per cent of their revenues from securities (in 1989 the limit was lifted to 10 per cent). In October 1995 it decided to allow bank employees to work for Section 20 affiliates, to let banks market subsidiaries' products and to ease restrictive regulations on financial asset sales between banks and affiliates. Documents released in July and August 1996 suggest that the revenue limit be raised to 25 per cent. If these suggestions are implemented they will in effect dismantle the central pillar of the Glass-Steagall Act and allow US banks the same scope of banking activity allowed to banks in London and the rest of Europe (The Economist 1996(c): 88).

[62] Isimbaki (1994), for instance, undertook a comparative analysis of the risk of large bank holding companies and nonfinancial sectors in the US. The findings provide no strong basis for concluding that a less risky banking system would result from the removal of the US barrier separating banking and commerce.

Furthermore, the legal segmentation of the financial services industry in a number of highly compartmentalised institutional sectors gives rise to the emergence of 'grey' areas which may not fit into legal definitions. The relative importance of such financial services has been increasing due to market forces and competitive conditions. With the distinction between traditional banking and other financial services becoming increasingly blurred, traditional regulatory frameworks need to be adapted. Under these circumstances, a reassessment of the scope and legal basis of the regulatory system is necessary in order to reduce regulatory anomalies and distortions as well as to bring institutions operating in the 'grey' areas into the regulatory ambit.[63]

Finally, limitations on the scope of permissible business activities may lead to an 'unlevel playing field' between financial institutions which does not conform to the principle of competitive neutrality.

4.2.2.2 Investments in Property

Concerns about the potentially high risk of illiquid *investments in property* have been the main reasons behind limitations placed on such activity. Restrictions range from outright prohibition on the offering of property related services or to investment in property (other than for the bank's own operating needs) to limits relating to the size of real-estate investment relative to the bank's capital.

4.2.2.3 Equity Participation in Non-financial activities

Three prudential arguments have been put forward to justify regulatory constraints placed upon banks' *equity participations in non-financial activities* (OECD 1987: 60). The first relates to the relatively illiquid nature of equity participations. Under adverse circumstances these may only be realised at a loss. Second, it is argued that the excessive conversion of deposits into equity capital should be avoided to preserve a bank's solvency and the integrity of primary banking functions. Third, substantial equity participations and especially controlling interests are considered to be a weakness for a bank when the relevant entity experiences difficulties.[64]

---

[63] Such reassessments may involve a balancing of contrasting political and sectoral interests. In particular, they imply an evaluation of the impact of structural regulatory changes on a number of broad policy goals such as the degree of competition, the requirements of monetary policies, the desire to avoid concentration of power, and the need to ensure an equitable treatment of the various groups of financial institutions. See for instance the Report of the Committee of Investigation into the Promotion of Equal Competition for Funds in Financial Markets in South Africa (Jacobs Committee Report) (Republic of South Africa 1992).

[64] The issue of concentration of power is also a fundamental consideration relating to the acquisition of significant equity participation by banks in non-financial activities. Banks may for instance take over failing companies by converting loan exposures into equity stakes. Similar considerations apply to lending by a bank to its non-bank subsidiaries and related companies. The extent to which banks are able to influence the management of the company and the potential conflict of interest between the bank as shareholder and as lender is emphasised. Concern has also been voiced about the public policy implications of bank's access to inside information, the potential competitive advantage gained by 'insider' banks and the undue influence on lender-customer relations.

There are obvious weaknesses in such an approach. Small equity investments in a wide range of industries may contribute to a diversification of assets, sources of income and spreading of risk. In some cases the conversion of credit into equity may preserve the creditworthiness of a debtor engaged in restructuring and prevent or limit the extent of write-offs or losses. On the other hand, the resulting investment may be more negative than liquidating or even writing off a bad loan.

Clearly the issue of equity participation and property investment can be resolved by an application of general prudential principles. As in the case of 'normal' banking activities, equity participations and property investments carry a risk. The justification for regulation in this area is purely to ensure effective financial risk-management of these investments and participations. As such, the issue can be incorporated into the general framework of risk-related regulation. For instance, if a bank uses its own capital to invest in the equity of other enterprises, this should be regarded as impairing its own capital. The implication is that the outright regulatory prohibition of these activities is not justified but that the risks associated with these activities should be accommodated in a framework which regulates risk-management across functional activities.

4.2.2.4 Interbank Equity Participation

A general prudential concern with regard to *interbank equity participations* relates to the transparency of such relationships. A second consideration involves the soundness of the individual institution and the implications of interlocking ownership. However, bank investment in institutions specialising in bank-related business may strengthen the capacity of the bank to compete with non-bank financial intermediaries and / or foreign institutions. It may also foster the innovative process in financial services.

Admittedly, interbank holdings are a more complicated prudential issue than equity participations in industrial companies. This is due to the likely contagion effect that the failure of one banking institution could have on another institution which participates in its equity. Contrariwise, it can be argued that cross-shareholding by banks may in fact reduce the dangers of a crisis of confidence if a viable institution is perceived as supporting a weaker one. Again, the problem can be related to the risk exposure of the individual institutions and the influence on systemic risk. The regulatory dilemma lies not in the prohibition of such equity participations but in determining what the implications of these are on the risk exposure of the institutions both separately and jointly.

4.2.2.5 Limitations on Insurance Business

A special prudential concern relates to the acquisition of controlling interests in insurance companies. There are some prudential justifications for separating the two activities on the grounds that the risks incurred by and the supervision applied to the two industries are different. Thus it is reasoned that 'the close linking of banking and insurance business may give rise to forms of risk whose importance and character

cannot be easily incorporated within the existing framework of banking supervision' (OECD 1987: 61).

The inability of regulators to identify and understand insurance risks which are nothing but another form of financial risk does not amount to a convincing justification for the prohibition or limitation of insurance business by a bank. Rather the risk inherent in insurance activities should be taken into account in the overall risk assessment.

4.2.2.6 Limitations on Securities Business

Limitations on securities business may range from the prohibition of such business by banks (as is still formally the case in the US) to requirements that such business be conducted in separately capitalised entities. The purpose of erecting such a "firewall" between banks and their securities units is to financially insulate banks from their securities affiliates and that emergency assistance facilities need not be extended beyond the banking sector to securities firms.

However, the firewall approach merely compartmentalises the risk of these activities. The risks related to conducting securities business should be evaluated together with the overall risk attached to the banking portfolio. A legal separation is not favoured.

Daskin *et al* (1984) analysed the separation of commercial banking and investment banking in the UK and Germany and concluded that the efficiency gains from eliminating traditional legal inter-industry barriers outweigh efficiency losses.

4.2.2.7 General

From a prudential perspective, measures related to the range of banks' permissible business activities are justified in so far as they seek to keep the risk exposure of these institutions at an acceptable level. However, the outright prohibition of some activities may not be justified, since from a risk-return efficiency point of view the performance of additional services by a deposit-taking institution and the availability of additional assets to an institution should prove beneficial for performance. As Hall (1987: 160) argues:

> *'The overriding drawback, apart from breeding inefficiency, of most of these restrictions is that very often they can cause the event against which protection is sought by denying intermediaries the flexibility to deal with problems as they emerge.'*

As already noted, structural change in the financial system is blurring the lines of business among financial institutions. Regulatory authorities are increasingly faced with the dilemma of specifying the acceptable range of business activities of different financial institutions. Regulatory actions in this field will tend to lag behind market developments because of existing legal and practical constraints and the complexity of the issues involved. The scope for regulatory action may be limited by the need to

test regulatory adjustments motivated by principles of efficiency and competitive neutrality against their implications for safety and soundness.

The process of relentless structural change and the inevitable broadening of banks' permissible business activities will perforce increase the complexity of the functions performed by banks as well as the heterogeneity of banking organisations. This has major consequences for regulatory policies and methodologies relating to the management of risk.

First, the complexity of techniques involved in the various sectors of financial markets require *far greater knowledge and specialised skills* than is required for traditional deposit-taking activities. This applies to market participants and regulators alike. It is therefore regarded as imperative that entry requirements pertaining to these financial markets remain such that only fit and proper participants are able to engage in specialised activities. In some cases this may imply, as Mark Twain humorously observed, putting all one's apples in one basket, provided that the basket is watched very carefully. Formulated differently, bankers attracted by new opportunities should take care not to neglect their core business, which entails acting as **deposit intermediaries**. Besides providing a number of services, their **basic function** remains the borrowing and lending of money. Likewise, in broadening the scope of regulation, regulators will be required to increase the depth of their knowledge of financial markets. Begging this knowledge, adequate prudential supervision will not be possible.

Second, there is both a *qualitative and a quantitative difference in the weights of the risks* incurred in traditional banking intermediation and other financial activities. The assessment and management of all financial risks are important. This point was echoed by Robin Leigh-Pemberton, then Governor of the Bank of England (The Banker 1993: 16):

> *'There are lessons for bankers. Close attention to the control and pricing of risk is...at the heart of the banker's professional life, and no amount of competition or marketing strategy should ever divert from it.'*

Ultimately, all business activities of banks should - by means of the risks thus incurred - be reflected in institutions' capital requirements.

Third, greater involvement in other financial activities may lead to the *emergence of new forms of risk* resulting from the interrelationship between various market compartments and the covariance of risk. On the other hand, some of the risks may be compensated for by rewards of additional activities, as argued above.

Ideally, therefore, management and regulators should focus on the net result with regard to risk exposure that the provision of new services entails for individual financial institutions and the system as a whole.

4.2.3 Disclosure Requirements

Sunlight is said to be the best of disinfectants; electric light the most efficient Policeman.
Louis Brandeis (1913)

4.2.3.1 Disclosure in Financial Statements and Supervisory Returns

Financial institutions are usually required to disclose a far greater deal of information and follow more detailed procedures than is the case with other economic entities. The importance of information in the regulatory process can be traced back to the newly emerging theory of financial intermediation, which stresses the role of financial intermediaries in overcoming informational asymmetries between market participants.[65]

Disclosure requirements are a form of regulation that may carry significant compliance costs. The question is not necessarily one of *increased* information, but rather of how the quality of information can be improved so as to maximise its usefulness to stakeholders, while minimising the costs to financial institutions (Australian Government Publishing Service 1981: 290).

On the other hand, disclosure may also bring benefits to the disclosing bank. As Diamond and Verrecchia (1991) have shown, revealing public information to reduce information asymmetries can reduce a bank's cost of capital by increasing the liquidity of its securities.

Disclosure requirements are deemed necessary to be able to evaluate the risk exposure of individual financial intermediaries as well as the financial system as a whole. The focus should be on the disclosure of risks undertaken and the results achieved by management in managing these risks.

The objective of disclosure in financial statements must be to obtain 'full disclosure' in terms of generally accepted accounting practice (GAAP). The philosophy of full disclosure should therefore contain the following principles (Van Greuning 1993: 106-107):

- financial statements should provide information on whether financial intermediaries manage funds in their capacity as agents or as principals;
- disclosure policies should provide the same information to depositors than is available to shareholders;
- assets should be disclosed at market value;
- reserve accounting practices should not be allowed;

[65] The theory of Mirrlees and Vickrey, the 1996 Nobel laureates for economics, have for instance been applied in the study of insurance. Insurers cannot observe whether their customers have taken proper precautions. By charging deductibles and making claimants bear a portion of losses, insurers can align their incentives properly. If the premiums reflect the risks which would occur in the event of the precautions being taken, the customer must face big enough losses to induce him to take them (The Economist 1996(b): 94).

- all (hidden) reserves should be disclosed; and
- the consolidated activities of financial intermediaries should be adequately disclosed.

Because full disclosure should essentially relate to the disclosure of risk exposures by a bank, it should also entail disclosure of off-balance sheet business as well as all other major risks not adequately identified by balance sheet information.

Kluger (1989: 275-282) reasons that in periods of financial distress, bank management may attempt to suppress unfavourable information from creditors and investors through the use of undisclosed changes in accounting methods, estimates, and procedures, thus reducing the quality of the information contained in financial statements. The danger that this may occur, directs the attention to the important role of auditors in the prudential context.

4.2.3.2 The Role of Auditors

Traditionally the role of the bank's auditor has been to report to the shareholders of the bank on the truth and fairness of the annual accounts. In the performance of this duty, auditors were subject to self-regulation by international accountancy bodies such as the Institute for Chartered Accountants or Chartered Institute of Management Accountants.

To a very large degree the effectiveness of banking supervision depends on the knowledge, experience and integrity of bank auditors. Consequently there has been a growing tendency for bank auditors to become more involved in reporting to or for the supervisory authorities on matters relating to prudential regulations. For example, in various countries auditors are required to:

- report on prudential and statistical information not relevant to the annual accounts; and
- give an opinion on the administrative organisation and the information control systems of the bank.

These matters raise important questions about the relative levels of responsibility undertaken by the auditor, by bank management and by the supervisor. This was the subject of a recent survey on the involvement of auditors in the prudential control of banks, conducted by the Fédération des Experts Comptables Européens (FEE 1993). The survey covers the following areas of involvement by auditors in prudential regulation:

- appointment and responsibility;
- relationship with the supervisory authorities;
- relationship with the bank;
- reporting;
- different roles of external auditors; and
- future developments.

Supervisors normally have some degree of influence on the *appointment* or re-appointment of the external auditor. This may range from requiring consultation to the legal authority to object to an appointment. Apart from the statutory audit *responsibilities*, the external auditor may be involved in the prudential controls of banks as a consequence of further regulations imposed by the regulatory authorities on auditors and banks. Examples of specific activities of the bank which the auditor is required to audit or review are as follows (FEE 1993: 14):

- reporting on large credits and credit limits and other banking risks;
- review of electronic data processing;
- reporting on money laundering;
- reporting on insider trading;
- reporting on participation in tax-evasion schemes;
- audit of safe custody, administration of and dealing in client assets; and
- involvement in review work of supervisory authorities.

Clearly these responsibilities go beyond the auditor's responsibilities in relation to the audit of the annual accounts. Auditors may also have a responsibility to the supervisory authorities for the audit or review of prudential returns submitted by banks to the authorities. In addition, the auditor may be required to evaluate the organisational and internal control systems of a bank.

In order to bring about a transparent division of responsibilities amongst bank stakeholders, it is desirable that the responsibilities of auditors which lie outside the statutory audit boundaries, be formulated by the authorities in the form of policy statements or guidelines.

The *relationship between the auditor and the supervisory authorities* can be viewed from a number of different perspectives (FEE 1993: 16-20). First, in relation to the duties imposed on the auditor to communicate details of irregularities or infringements to the supervisory authorities; second, in relation to the auditor's duty of confidentiality, both to the bank and to the supervisory authorities; third, in relation to standards or guidelines issued by the supervisory and other authorities as regards auditing procedures for the external audit of the bank's annual or interim reports and accounts and the form of the auditor's report thereon; fourth, in relation to the situation where the auditor is considering qualifying a published report; and fifth, in relation to any obligation on the part of the auditor to provide the supervisory authorities with a copy of his audit report to the shareholders.

Regarding the *auditor's relationship with the bank*, it is usually accepted that the bank's management is responsible for financial statements, prudential returns submitted to the supervisory authorities etc. The role of the auditor is to inform the bank management of the 'highest level' of material weakness in a report submitted either to the management of the bank or the supervisory authorities. The bank management may be allowed or even required to respond to the auditor's report of material weaknesses (FEE 1993: 20-21).

There are four categories of *audit reports* which the auditor may be required to make to the supervisory authorities (FEE 1993: 21-26):

- on the annual accounts;
- on published interim accounts;
- on prudential returns reflecting interim information; and
- other reports.

In principle, auditors should be required to provide the supervisory authorities with a description of, or opinion on, the bank's exposure to the differing banking risks, the bank's approach to the monitoring of such risks, the adequacy of the bank's assessments of risks and their hedging or covering of such risks.

The *different roles of external auditors* consist of three types, namely (FEE 1993: 26-27):

- the 'statutory auditor', appointed by the shareholders at the annual general meeting;
- the 'bank auditor', approved by the supervisory authorities; and
- the 'extraordinary auditor', appointed by the supervisory authorities to carry out specific investigations on its behalf.

In some cases there may be little distinction between these roles, especially as regards the functions of bank auditor and the statutory auditor. In some cases, the bank auditor may also be allowed to perform other functions, such as consultancy services, for the bank.

Some of the aspects of the work currently performed by auditors for the supervisory authorities may give rise to concern or discussion. As such, certain issues may be identified which may give rise to *additional future responsibilities of the auditor.*

The tendency of supervisory authorities to increasingly involve auditors in the prudential supervision of banks is to be welcomed as it serves the free flow of information and therefore benefits the process of risk assessment and management by banks. However, the responsibilities of the auditor should not fall outside the normal range of competence of the auditing profession. Moreover, the respective responsibilities of the various bank stakeholders should be clearly defined. A misconception about such roles can lead to inappropriate reliance being placed by one on the work of the other.

A framework for the division of responsibilities between bank supervisors and external auditors was proposed by the International Federation of Accountants (IFAC) in 1989. The statement observes that the supervisor and auditor have, in many respects, complementary concerns regarding the same issues, though the focus of their concerns may not be the same. For example, the supervisor is primarily concerned with the stability of the bank and the protection of depositors, whereas the auditor is primarily concerned with reporting on the financial position of the bank and on the results of its operations.

These complementary concerns necessitate that regulatory authorities recognise that financial statements have not been prepared primarily for a prudential purpose. The IFAC-statement recommends that the supervisor should bear in mind, *inter alia*, the accounting policies used in the preparation of the statements and their appropriateness for prudential purposes and that financial statements are prepared on the basis of judgements and estimates made by the management and assessed by the auditors, which to some extent makes the information subjective.

In addition it is stated that, given the different purposes for which internal control is evaluated by the supervisor and the auditor, the supervisor cannot assume that the auditor's evaluation of the adequacy of internal controls will necessarily be appropriate for the purposes for which the supervisor carries out his evaluation.

Despite the validity of some of the limitations expressed in the statement, it is contended here that external auditors should form part of the risk-management process in banks. The process of risk-management is intrinsic and essential to the activity of any bank and consequently greatly influences the going-concern basis on which the financial statements are prepared. A risk-based approach to bank supervision would therefore require a reassessment of the fundamental approach adopted by external auditors. In essence, this would entail a change from a balance-sheet audit to an audit of the risks inherent to the banking activity.

The IFAC-statement (IFAC 1989) provides the following as examples of criteria that need to be established for a possible extension of the auditor's role as a contribution to the supervisory process:

- the basic responsibility for supplying complete and accurate information to the supervisors must remain with the bank management;
- the normal relationship between the auditor and his client needs to be safeguarded;
- before concluding any arrangement with the supervisor, the auditor should consider whether any conflicts of interest may arise;
- the supervisory requirements must be specific and clearly defined in relation to the information required;
- the tasks which the auditor is asked by the supervisor to perform need to be within his technical and practical competence;
- the auditor's task for the supervisor should usually be complementary to his regular audit work; and
- certain aspects of confidentiality need to be protected, in particular the confidentiality of information obtained by the auditor through his professional relationship with other clients, that is not available to the bank or public.

The greater recognition of risk-based prudential regulation and the increasing complexity of banking risks will result in a greater reliance by supervisory authorities on auditors in those areas for which the auditor is particularly suited. Some examples of such tasks are:

- the verification of prudential returns;
- the evaluation of a bank's information and control systems on the basis of criteria provided by the supervisor;
- the expression of an opinion on adherence to appropriate accounting policies; and
- the expression of an opinion on general and specific risk exposure.

In all cases the focus of these activities should be the risk-management processes of the bank. This process should benefit from the exchange of information between all stakeholders (especially management, supervisor and auditor) as this provides an independent assessment in important risk-areas. The role of external auditors is therefore crucial to the success of a co-ordinated approach to risk-management in the banking sector.

4.2.4 Capital Adequacy

4.2.4.1 The Role of Capital

One of the most important prudential regulatory measures is to limit the risk of financial failure by imposing capital adequacy requirements. There is an essential link between capital adequacy and bank failure, as a bank can only be considered to have failed when it has exhausted its capital resources.

As a measure of the ability to repay stakeholders, especially depositors, in the event of liquidation, capital adequacy must be judged in relation to the risk that financial intermediation involves. Capital requirements are necessary not only because they reduce the risk of bank failure but also because they limit the incentives to take risk (Baltensperger and Dermine 1987: 85). The larger the capital base, the larger the combined losses of shareholders in the case of bankruptcy.

Why can the market not be relied upon to determine an adequate level of bank capital? Four reasons have been put forward (Dale 1982: 57-58). In the first place the market will be unable to take account of the economic externalities caused by bank failure (as noted above). Second, market forces will tend to drive capital ratios down in order to maximise the return generated by the capital resources. Third, protective regulatory measures such as deposit insurance or emergency support facilities may allow banks to lower their capital ratios without having to pay an additional risk premium to attract deposits. Finally, the mere existence of banking regulations may lead banks to feel protected and therefore assumed that the regulatory authorities would be obliged to provide support in the interest of systemic stability.[66]

Capital adequacy requirements can take a variety of forms. In most financial systems a minimum amount of capital is required. In addition, many regulatory authorities

[66] It is submitted that the above approach of Dale (1982) is not in all respects analytically sound as the penultimate and ultimate reasons rely more on the aspect of moral hazard (which is *caused* by regulations) than on considerations of market failure.

require the maintenance of a capital- (or solvency) ratio. This may consist of a minimum balance sheet ratio (such as between capital and total assets or liabilities), or some weighted measure of risk assets. Although in some cases no formal and generally applicable ratio is established, capital adequacy is still carefully monitored by regulators, even if this occurs in a less formal way (Baltensperger and Dermine 1987: 85).

What conceptual criteria of capital adequacy should be applied? In the broadest terms, capital is adequate when it reduces the possibility of future failure to a predetermined level.[67] However, this begs the question of the nature of economic conditions against which a bank should be protected, i.e. going-concern or disaster scenarios. On a conceptual level, the challenge for regulators is to strike a balance between these two scenarios, based on their subjective assessment of the overall health of the financial system.

In addition to ordinary operational functions, (i.e. capital required for the conduct of banking activity) there are three specific functions of capital for banks which are relevant from a regulatory perspective: 'buffer' functions; public confidence and management constraint (OECD 1987: 105-106).

A primary role of bank capital is to provide a *cushion against losses*. As argued above, the assessment of capital for precautionary purposes is problematic. This is particularly so in times of rapid economic and financial change. The buffer that capital provides against unexpected losses is of vital importance for the protection of depositors and other stakeholders. This role acquires additional importance once the active risk-management by financial institutions is recognised. The total risk exposure of a bank should therefore be measured in relation to its capital.

A second and related function of capital adequacy is derived from the fact that the viability of a bank critically depends on *public confidence*. Although the availability of capital is neither a perfect indicator of the viability of a bank nor a sufficient condition for the maintenance of confidence by depositors and stakeholders, it is a major factor influencing their perceptions regarding the institution. Capital is the most visible symbol of a bank's strength. It is the main 'yardstick' against which the market assesses the capacity of a bank to withstand losses and to manage risk. In this sense capital requirements provide the support for other prudential requirements.

A third fundamental, safety-orientated function of bank capital is to *discipline bank management*. This is fostered by regulatory standards on the level and composition of capital and its relationship to risk factors. By focusing on the required level of capital adequacy, regulators are able to influence the potential for and the relative cost of financial activity. The introduction of constraints on risk-management, suggest

[67] Sheldon (1995) proposes an alternative to the capital adequacy requirements proposed by the BIS, namely setting a maximum risk of insolvency that no bank may exceed, and each bank complying by holding a capital-to-asset ratio commensurate with its overhead costs and with the expected value and volatility of its rate of return. The main advantage of Sheldon's (1995) approach is that it is a framework for assessing the costs and benefits that increasing capital standards entail.

that regulators must also assess the implications in terms of competition and effectiveness.

The various conceptual difficulties encountered in assessing capital adequacy and functions of capital, complicate the related problems of defining and measuring capital, two issues discussed below.

4.2.4.2 The Definition of Capital for Regulatory Purposes

General

The definition of bank capital varies significantly across financial systems. This is due to differences in accounting principles and methods, specific institutional features of banks and the difficulty of comparing various financial instruments. However, there is some agreement amongst regulators as to the conditions applicable to the inclusion of capital and the treatment of some of the components of capital.[68]

There is general agreement on the conditions that should apply to 'core' capital. Core capital must (OECD 1987: 107):

- be permanently available to absorb losses;
- not impose contractual charges against earnings; and
- not be redeemable at the holder's request.

On this basis it is possible to identify several balance sheet items that belong to the capital base. The most common of these are:

- paid-up ordinary shares;
- irredeemable and mandatorily convertible preference shares;
- share premiums;
- disclosed reserves; and
- retained profits.

These items having been identified, disagreement may exist on the following balance sheet items: subordinated debt, undisclosed reserves and provisioning as well as disagreement regarding the approach adopted towards the consolidation of a balance sheet for capital purposes. In inflationary environments the revaluation of assets may also become a contentious issue.

Subordinated Debt

The primary characteristic of subordinated debt is that the claims of the lender on the borrowing institution are subordinated to those of other creditors. However, the extent to which such debt may form a part of capital depends on the specific conditions of the loan contract .

[68] The international efforts to promote convergence in this area are spearheaded by the BIS.

Theoretically, subordinated loan stock does not possess any of the essential attributes of capital: it is not necessarily permanently available, it usually carries contractual servicing obligations, and it cannot be used to absorb losses of a going concern. On the other hand, subordinated loans differ from other forms of debt insofar as they provide protection to depositors and other stakeholders in the event of liquidation, and, when so structured, lend support to bank funding and also increase market confidence (OECD 1987: 107).

Regulatory practices differ considerably with regard to the treatment of subordinated debt. Historically, supervisors did not accept subordinated debt as part of the capital base. However, developments in financial markets have in some cases persuaded regulators to adapt this view. First, innovations such as perpetual maturities and automatic convertibility have reduced the differences between subordinated debt and capital. Second, banks active in international markets often use subordinated loans denominated in a foreign currency for international activities and to reduce currency and maturity mismatching (OECD 1987: 108-109). Finally, investors display a preference for subordinated debt instruments rather than conventional equity, thereby making it easier for banks to obtain such funds when access to the stock market proves difficult.[69]

Consequently, some regulatory authorities permit the inclusion of subordinated debt as well as certain special capital-market instruments, such as variable-rate preferred stock and participation certificates into the capital base. Such inclusion is usually made subject to conditions in terms of maturity, redemption and payment. Limits have also been placed on the amount of subordinated debt eligible for inclusion.

Undisclosed Reserves

The treatment of undisclosed or hidden reserves is contentious. The rationale for considering such reserves as part of the capital is that they represent an available source of financial strength for the bank to meet unexpected losses.

Some countries do not consider undisclosed reserves to form a part of capital, others allow them but do not include them in supervisory ratios whilst others incorporate them in the capital base, provided that such reserves are identified and accepted by the supervisor. Empirical evidence on the relative competitive effects of the adoption of risk-based capital requirements indicates some uncertainty on behalf of the market regarding the treatment of hidden reserves (Cooper *et al* 1991: 367-381).

Provisioning

Capital adequacy is closely connected to provisioning since the main purpose of provisions is to allow for future use of banks' capital resources. Capital and provisions can be considered complementary means of strengthening the position of

[69] Wansley *et al* (1989: 217-233) have argued that in general announcements of the issuance of additional common stock are associated with significant negative effects, but that the market does not appear to treat subordinated debt announcements as similar to equity.

a bank. Provisions account for specific and general banking risks, whilst capital is a general resource that provides the basis for the risk-management activities of banks. The interaction between capital and provisions are determined by the specific regulatory, accounting and tax policies of a financial system.

Although the differences in the treatment of provisions for certain types of risk are considerable, some general principles have emerged. These concern the specific techniques of provisioning as well as the respective roles of stakeholders, especially management.

The nature of provisions is largely determined by the tax implications thereof. The general principle is that provisions are only allowable as taxable expenses where in the opinion of the tax authorities the claims may reasonably be regarded as irrecoverable.

General provisions are made against general and latent risk of losses. As such they have some of the characteristics of capital. The methods used to compute general provisions are often based on average losses over a certain period of time. The recognition of increased risks and uncertainties in the present economic environment may suggest that a higher level of provisions than was applicable in the past may be appropriate. The most important consideration in this regard is whether general provisions should be tax-deductible, as many regulatory authorities require these to be made out of taxed income. This feature (i.e. non-tax deductibility) may discourage banks from providing for general risks beyond the required minimum.

Specific provisions are made against current or future liabilities and represent a recognition of specific risk, even though the amount of loss cannot be determined with precision. Specific provisions cannot be regarded as a part of capital since they are not able to meet unexpected losses. In most financial systems, specific provisions are tax-deductible within limits specified by auditors or regulatory authorities.

The responsibility for assessing and managing financial risk exposure and for making adequate provisions against risk rests primarily with the management of the bank. Management policy on provisioning must be reviewed and approved by the bank's auditors. The role of supervisors is to ensure that a bank's approach to provisioning is based upon a prudent and realistic assessment of the risks incurred and the bank's overall capital strength.

By directly affecting the profits and dividends of a bank, provisioning influences the standing of a bank in the marketplace. Consequently, banks have to strike a balance between an appropriate level of provisions, an adequate amount of retained profits and distribution of dividends that is necessary to retain access to equity markets (OECD 1987: 111-112).

Consolidation

The increasing diversification and internationalisation of financial institutions and the blurring of lines of distinction between banking and non-banking activities underline the importance of accounting consolidation and consolidated supervision. A consolidated approach is necessary to ensure that there is no circumvention of the requirements of risk concentration through bank subsidiaries and affiliates. Nevertheless, the application of the principle of consolidated supervision poses considerable analytical and practical difficulties in determining the existence of legal and economic connections between separated entities. These difficulties are compounded by internationally active banking groups, and also depends on the degree of disclosure allowed by regulatory authorities in foreign financial systems. Traditionally, balance sheet consolidation implied only a partial statistical consolidation of the banks in a banking group. It has, however, become clear that non-bank activities have an important impact on the overall risk exposure of a banking group.

Van Greuning (1993: 101-112) argues that the lack of an accounting consolidation on a principal / agency basis, is a deficiency of current international approaches to consolidated supervision. When a financial intermediary is acting as an agent, the risk of market participation lies with the investor and not the institution concerned. However, when the financial intermediary is acting as a principal, the financial intermediary accepts all the risks involved and guarantees the investor a specific capital and / or return on the investment or deposit placed with that financial intermediary. It is consequently reasoned that the capital adequacy of financial conglomerates will be significantly clearer if it can be shown (through consolidated financial statements) to what extent the group is acting as a financial intermediary on a principal basis. Van Greuning (1993: 112) concludes that in view of 'the so-called moral hazard that may attach to banks, a higher capital adequacy requirement might therefore have to be imposed on banks in such a group.'[70]

4.2.4.3 Measurement of Capital Adequacy

It is clear that even on a conceptual level, the determination of what constitutes capital adequacy is problematic. Moreover, there are a number of contentious issues in determining the definition of capital for supervisory purposes, as set out above. These problems are inevitably translated into practical complications when capital adequacy is to be measured for prudential purposes. Finally, there is an inevitable lack of precision in determining the quality and the size of the risks to be protected by the capital base.

---

[70] Whilst the merits of principal-based consolidation cannot be faulted from a risk-management perspective (in the sense that an intermediary engages in higher risks when acting as a principal), it is not conceptually correct to base this conclusion on the moral hazard argument, which is actually a cost associated with regulation. For a more in-depth discussion on the principal / agent distinction see also Republic of South Africa (1992: 52) and South African Reserve Bank (1992: 8-10).

There are several ways of expressing capital in relation to the overall business activities of a bank. In essence, however, these constitute variants of two basic approaches, being the gearing ratio and the risks assets ratio. These variants can also be used in a complementary way.

The *gearing ratio* relates bank capital to total liabilities. By placing limits on the gearing ratio, regulators can limit the capacity of a bank to expand with given capital resources. The major advantage to this approach is its simplicity. The gearing ratio is therefore often used by analysts when assessing a bank's capacity for expansion as well as when making inter-bank comparisons. From the point of view of the bank it has the advantage that it does not constrain the structure of banking activities, thereby allowing maximum operational flexibility.

From a risk-management orientated paradigm, the simple gearing ratio approach has severe limitations. A major disadvantage is the inflexibility with regard to balance sheet items, in the sense that they can only be included or excluded. It does not incorporate off-balance sheet risk, nor does it recognise the fact that individual balance sheet items carry different risks. In addition, this approach encounters conceptual problems when other 'non-banking' financial activities are carried out within a financial institution. Finally, it does not appreciate that banks are not simply exposed to risk, but manage risk in a number of ways that cannot simply be deduced from balance sheet aggregates.

Awareness of these limitations has led several regulatory authorities to adopt a more sophisticated approach based on weighted risk assets ratios. In the *risk assets ratio*, different weights are attached to different categories of assets. The weights reflect the perceived riskiness of the various banking activities. Depending on the asset structure, the use of the risk assets ratio improves the assessment of the overall risk exposure of a bank.

One drawback of this approach is that it requires a subjective assessment by regulators of the risk of each particular activity or asset. Although theoretically such assessment can be based on historical experience, it inevitably involves an element of subjectivity by the regulator. Furthermore, assigning a fixed risk factor to particular activities or assets may result in moral hazard.[71]

Two approaches to the use of risk-weightings are possible. On the one hand, regulators may choose to use predetermined and fixed weightings. Apart from the relative simplicity of this approach, it is also in accordance with the principle of stability, as uniform standards are introduced. On the other hand, more complex systems with more highly refined cover ratios for different risk factors permit a differentiation of requirements according to the individual bank's nature and business structure. The latter approach favours the efficiency-related principles of financial regulation.

---

[71] See for instance Igawa and Konatas (1990) who find that in a credit market characterised by *a priori* asymmetric information, the use of security can result in moral hazard when making credit decisions.

Ryan (1981) argues that there is a cyclical element in the use of measurement approaches to capital adequacy. He reasons that in the beginning, simple ratios are used; however, when it is realised that these do not take a number of important factors into account, ratios become more complex. The more complex ratios become like 'straw men' and can easily be criticised because they are necessarily subjective but give the impression of precision. These are eventually replaced by more easily understood ratios.

Whichever system of measurement is adopted, it is clear that a single ratio cannot incorporate all the factors pertaining to a bank's exposure to risks and the corresponding capital requirements. As Pecchioli (OECD 1987: 110) argues:

> *'The ratio per se is unlikely to capture the overall quality of a bank's portfolio and the degree of concentration of business in certain sectors, markets or geographical areas. Furthermore, any judgement on the solvency of an institution cannot disregard such fundamental factors such as the quality of management, the standing of the bank in the marketplace, its profit potential, the strength of its provisioning policy and, of course, the adequacy of liquidity. It is generally agreed, therefore, that the measurement of capital adequacy is only one, albeit very important, element in the overall process of assessment of bank soundness.'*

These considerations have led some regulatory authorities to refrain from prescribing fixed quantitative guidelines applying to all institutions irrespective of specific circumstances. Other regulators have adopted a uniform quantitative ratio while some authorities have the power to change the ratio in specified circumstances.

4.2.5 Risk Assets Limits

> *Behold, the fool saith, 'Put not all thine eggs in the one basket' - which is but a manner of saying 'Scatter your money and your attention', but the wise man saith, 'Put all your eggs in the one basket and - WATCH THAT BASKET.*
>
> Mark Twain (1835-1910) in Pudd'nhead Wilson

The use of risk assets ratios, where maximum holdings of certain types of assets are specified in terms of capital proportions was discussed above. This section focuses on the most important risk diversification rules. These specifically apply to loan concentration, interest rate risk, country risk and foreign exchange risk. In addition, there is growing awareness by regulatory authorities of the risk posed by the use of off-balance sheet instruments such as options and futures.

Even though risk asset limits can technically be considered as portfolio constraints to the extent that they inhibit the flexibility of financial institutions, the diversification of risk is part and parcel of any policy of prudent risk-management.[72] Correctly applied, risk assets limits can therefore be considered a justified objective from the perspective of all bank stakeholders. In short, the principles of stability and efficiency

[72] For a discussion on the use of portfolio theory in determining some of the shortcomings of the methods of risk assessment used in banking, see Schaefer (1987).

need not be seen as conflicting. The challenge here lies in determining the appropriate level and distribution of risks, with due regard to the interdependence of these risks and the risk-management activities of the banking entity as a whole.

In assessing these risks and relating them to capital adequacy, care should therefore be taken not to rely too extensively on the 'building block' process. According to this approach, each risk should be covered by a minimum amount of capital. Yet if all risks are simply added, the result could be a stringent capital requirement that takes no note of how different risks affect each other. The building block approach, favoured by the Basle committee of central bankers, does not fully reflect 'portfolio effects': namely the fact that some risks counterbalance others (The Economist 1993(c): 73-74). Rather, the focus of risk assessment should be on the sum of all the risks, and not the parts thereof. This may result in a completely different measure of overall risk.

Dimson and March (1994) investigated the three leading regulatory approaches to setting capital requirements, namely the 'comprehensive' approach (used in the US and Japan), the 'building block' approach (preferred in the European Union) and the 'portfolio' approach used since 1988 in the UK. Using a securities firm's equity portfolio for simplicity, the comprehensive approach would entail setting capital aside for both long and short positions; the building block approach uses both the gross and the net value of exposure to determine capital requirements; whereas the portfolio approach ties the amount of capital to a simple calculation of the overall riskiness of a portfolio. The latter approach focuses solely on the net position, and defines riskiness as the extent to which the value of the portfolio is likely to fluctuate. The study concludes that the US comprehensive approach makes no link between risk and capital. While the building block approach produced better results, Brittain's 'portfolio' approach was the most sensitive to the measure of risk used (The Economist 1994: 86). While these findings have assisted in the resolution of academic disputes on how best to link capital requirements to risk it does not answer another crucial question namely the extent of capital required for the various levels of risk assumed.

4.2.5.1 Loan Concentration

The prudential concern regarding the credit risks arising from loan concentration usually results in regulations controlling large exposures. These exposures may relate to individual exposures or to concentration of particular categories of assets (and liabilities). Prudent diversification demands not only that banks spread their lending amongst different sectors of the community but also the avoidance of loan concentrations to businesses whose risks are co-variant. In essence, limits on loan concentration are a means of reducing general credit risk.[73]

The monitoring of large exposures is carried out by means of the prudential returns that banks are required to submit to regulatory authorities. Usually, regulations regarding loan concentration relate the size such exposures to a maximum

[73] For a definition see paragraph 2.4.

percentage of a bank's capital. In some cases, limits are also placed on the total amount of individual large exposures.

Clearly, smaller and regional banks may be particularly vulnerable to loan concentration because of their excessive dependence on a limited number of customers and / or economic sectors. However, the issue of loan concentration applies equally to big banking groups subject to consolidated supervision.[74]

Regulatory differences with regard to loan concentration usually involve the treatment of various types of claims. For instance, claims guaranteed by the government are usually excluded from the measurement of large exposures whereas those guaranteed by a public-sector body are treated differently according to the nature and legal status of the entity concerned. Similarly, differences arise from the treatment of certain types of claims on non-bank customers (such as short-term commercial bills and promissory notes, bonds and shares) or the nature of the security applicable to claims (such as claims backed by deposits and back-to-back loans) (OECD 1987: 75).

4.2.5.2 Country Risk

Another prudential occupation that can be traced back to concerns regarding credit risk is that of country risk, being the risk that borrowers of a country may be unable and / or unwilling to meet their external obligations. Country risk, as in the case of credit risk, is a matter for commercial judgement on a case-by-case basis. As with other types of risk exposure by banks, it is essential that country risk is not excessive in relation to the capital resources of the bank. From a general risk-management perspective, the concept of country risk should be broadened beyond the confines of external credit obligations to include all forms of risk relating to country exposure such as cross-border transfer (payment) risk and off-balance sheet risk. International portfolios should be managed in accordance with the general requirements of a proper diversification of risks.

The responsibility of bank management is therefore to make an adequate appraisal of the risks concerned with country exposure and to manage these accordingly. The task of the regulators is to ensure that both the assessment and management of these risks are appropriate (OECD 1983: 88-90). They may also support management by facilitating the dissemination of information that is useful for the monitoring and controlling of country risk exposure, including aggregated data on the risk exposure of the banking system as a whole to particular countries.

Some evidence suggests that in the absence of clear accounting principles, banks tend to make allowances for possible losses on country risk to the extent that these provisions are tax-deductible or as far as the bank's earning situation permits (Baxman 1990: 497-522). The original objective of loan-loss reserves, which ought to be risk-related, is thus not attained.

---

[74] On the issue of large exposures to developing countries, see Taylor (1989).

General considerations on the supervision of country risk have been set out by the Basle Committee on Banking Regulations and Supervisory Practices (1982) and the OECD (1983). No official ceilings or guidelines on the appropriate exposure to particular countries were laid down, leaving the responsibility within the domain of bank management. Without the existence of predetermined levels of risk exposure, regulatory authorities need to supervise these risks more informally through regular examinations.

4.2.5.3 Interest Rate Risk

As previously identified, interest rate risk is a basic risk of financial intermediation and can be defined as the risk that changes in interest rates may adversely affect the net portfolio value and portfolio income of a financial institution. Interest rate risk may exist even in the case of perfect maturity matching, to the extent that these may still involve differences in the interest rate sensitivities of an institution's assets and liabilities.

The prudential importance of the issue of interest rate risk has risen in line with the increased volatility of interest rates. It has acquired further impetus through the greater reliance by banks on wholesale market sources for funding and the greater involvement of banks in securities business. The mismatching of interest rate positions may bring greater profits but also involve greater risks. Consequently, prudent interest rate management techniques need to be developed. These must then be integrated into the overall risk-management processes of a bank.

Although banks have improved methods for managing interest rate exposure, risk-management techniques are often complicated and difficult to implement. As an integral part of overall risk-management, banks are relying on hedging instruments, such as swaps, financial futures and options.[75] The development of markets for and the increased knowledge of these instruments have enhanced the potential for managing interest rate risk.

4.2.5.4 Foreign Exchange Risk

Foreign exchange or currency risk is another traditional banking risk that has been defined as the risk that changes in exchange rates may have a negative impact on the mismatch between foreign receivables and foreign payments. Three sub-risks were identified: the risk of dealing and taking a position[76], the operational risk caused by employees acting in excess of their authority, and the risk of counterparty default. This applies equally to spot and forward exchange rates.

---

[75] The literature on these instruments and their use for hedging purposes is extensive, see Frankel (1984), Campbell (1985), Martin (1985) and Bank for International Settlements (1986).

[76] Hartman (1994) describes the efforts by the BIS to introduce foreign exchange position limits on a uniform cross-country basis, focusing on their effectiveness and their possible impact on the functioning of both mature and developing foreign exchange markets. The paper provides insight into the use of foreign exchange position limits in developing countries for other than prudential purposes, in particular to support exchange rate and exchange control policies.

The increased volatility of exchange rates and the potential risks involved have generally led to a strengthening of internal control procedures and the development of adequate standards for operational safety. The role of bank management is to monitor and manage the level and quality of foreign exchange risk exposure.

Regulators have been forced to adopt a more integrated approach towards the risk exposure of a bank as a whole. This is effected by considering all forms of risk included in balance sheets as well as those arising from all types of off-balance sheet activity, a topic discussed in the following paragraph.

4.2.5.5 Off-balance Sheet Business

Three broad categories of off-balance sheet business can be identified: traditional banking operations, underwriting activities and derivative instruments.

There are a number of *traditional banking operations* that are not directly reflected in a bank's balance sheet: acceptances, documentary credits, endorsements and guarantees, and unused overdraft and standby facilities. Information on such operations is usually included in prudential returns and the risks attached to them are often incorporated in capital adequacy requirements and large exposures. Different weightings may be applied depending on the nature of the activities, the type of customer or the existence and quality of securities. The volume and variants of these instruments have grown considerably, with risk characteristics also differing from the original forms of financing.

Another growing area of off-balance sheet business relates to a bank's *underwriting activities* to support a borrowers issuance of market securities. A general form of such instruments is represented by facilities whereby an underwriting bank or group of banks guarantee the availability of funds at predetermined terms either at or over a specific period of time to a borrower issuing paper. Underwriting facilities represent a form of credit extension, which risk may be borne by the final investor (to the extent that it is holding the paper issued) or by the underwriting bank (insofar as it is compelled to meet its underwriting commitments). Underwriting facilities are similar to conventional standby lines of credit, the size being determined by the difference between the amount of the underwriting commitment and the volume of paper placed in the market. However, underwriting clauses are usually activated when the paper concerned cannot be adequately placed in the market. This may be due to general market conditions or as a result of the negative perception of a borrower's creditworthiness. Under these adverse circumstances, the underwriting bank would be forced to carry a full credit risk on assets of a substandard quality (OECD 1987: 81).

Prudent risk-management requires that underwriting facilities should be included in credit limits and risk assessment for individual borrowers. Similarly, these exposures should therefore be included in risk concentration considerations.

The third category of off-balance sheet risks are those relating to *derivative financial instruments* such as interest rate and currency swaps, repurchase agreements,

forward rate agreements, options and financial futures. The application of innovative instruments is a key tool in the managing of the risks of financial intermediation if correctly used.

De Swardt (1987: 7-8) analyses the underlying determinants of innovations in terms of demand- and supply-related factors. Demand-related factors can be classified into four categories namely: risk-transferring innovations, liquidity-enhancing innovations, credit generating innovations and equity innovations.[77] Supply-related factors that have led to financial innovations are technological advances, changes in financial regulation, increased competition and the volatility of financial markets. These innovations implied that banks increasingly rely on off-balance sheet business.

What are the regulatory concerns regarding the use of innovative financial instruments? One concern is that derivatives have reduced the transparency of balance sheets and made the nature and distribution of risks in financial markets more vague. An obvious example is the differing treatment of balance sheet items (which are usually denoted at cost) and off-balance sheet items (which can be denoted at market value). A second concern is that neither banks nor their customers always fully understand, or have the capacity to monitor, their true exposure. Third, regulators fear that a heightened sensitivity to risk amongst market participants could result in a rapid and indiscriminate withdrawal of credit lines by other banks. Yet another anxiety is that problems in one market could develop and spread more widely and more rapidly than in the past because of increased links between markets and participants, internationally and locally.

Nevertheless, the conventional view is that derivatives are highly useful risk-management instruments which need to be treated with circumspection.[78]

The regulators' prescription for these problems is: more disclosure of banks' off-balance sheet activities, more statistics about the market, better management understanding of the risks, and improvements in the legal and institutional underpinnings of the markets.[79]

---

[77] Risk-transferring innovations refer to new techniques which allow lenders, borrowers and financial intermediaries to transfer amongst themselves the risk inherent in financial positions. Liquidity-enhancing innovations increase the 'moneyness' or negotiability of existing financial instruments. Credit-generating innovations broaden the access to credit supplies, either by increasing the total volume of credit or by shifting traditional credit supplies. Equity-generating innovations are aimed at broadening the access to equity financing.

[78] See however Shah (1995: 17-33) who argues that this belief is misplaced and although useful for hedging, derivatives are high risk instruments which pose inherent threats to regulation and control, with consequential significant potential for catastrophy.

[79] The regulation of derivative markets, whilst a fascinating subject in its own right, falls outside the strict scope of this study, which focuses on the regulation of market participants (being banks), rather than the specific markets themselves. The interested reader is referred to SAICA (1995) for a discussion of the Group of 30 recommendations on the management principles for derivatives. The Group of 30 is a private, non-profit body consisting of 30 individuals representing international financial institutions and is chaired by Paul Volcker, former chairman of the US Federal Reserve Board.

To the extent that it is possible, these risks should also be factored into traditional banking risks. For instance, the risks arising from currency swaps and options should be covered within the assessment of foreign exchange exposure. Similarly, derivative credit risks should be incorporated into categories of loan concentration and country risk. However, the assessment of the risks involved in the use of these instruments may be very complex and the management and supervision thereof may differ considerably from more traditional risks.

4.2.6 Liquidity Adequacy

4.2.6.1 The Concept of Liquidity

Liquidity adequacy can be distinguished from capital adequacy in that it is concerned with the availability of funds in an 'on-going' business situation rather than at the point of liquidation. Like capital adequacy, however, it is concerned with ensuring that intermediaries are able to meet the risks of financial intermediation. Liquidity risk may take the form of transfers, demands for cash withdrawals, unused or new credit facilities, unanticipated expenditure, unexpected shortfall in earnings, as well as unexpected movements in the maturity profiles of assets and liabilities.[80]

Although liquidity and solvency are conceptually distinct, it may be asked whether in practice a bank can contract a liquidity problem independent of a solvency problem. Should a sound and solvent bank not at all times be able to borrow from the market? For reasons already explained, credit markets are not always perfect or even nearly perfect. Moreover, the solvency of a bank can never be undoubted as the financial condition of a bank is a matter of uncertainty to outsiders. As Dale (1982) argues: 'market fears that liquidity problems are linked to solvency problems, even if initially groundless, can soon become self-fulfilling.'[81]

4.2.6.2 The Measurement of Liquidity

Traditionally, liquidity was seen as the allocation of assets according to their capacity to generate the resources necessary to meet the requirements of bank liabilities. In an era of active liability and asset management as well as active risk-management, liquidity has become a function not only of asset allocation but also of the capacity of a bank to manage liquidity risk by acquiring additional funds from the market.

---

[80] Hall (1987 : 150-160) distinguishes two main functions of liquidity, namely that liquidity is required to deal with *funding risk* (the risk that insufficient funds will be available as they fall due) and with *interest rate risk* (which 'arises in situations of maturity transformation when unexpected movements in interest rates occur'). Although a related risk, Hall (1987) does not clearly distinguish between *maturity mismatch risk* and *interest rate mismatch risk*. Theoretically, a bank could be exactly maturity matched, and still be exposed to interest rate mismatch risk. For instance, six-month fixed rate deposits could be funding six-month variable rate loans. It is therefore submitted that interest rate mismatch risk is part of general interest rate risk and not liquidity risk.

[81] The corollary is that a bank that would otherwise fail may be kept solvent through a temporary injection of liquidity. This is one of the reasons for emergency assistance facilities, a topic discussed in more detail in paragraph 4.3 below.

To the extent that liquidity depended on the ability of a bank to turn existing assets into liquid funds at a negligible cost, its measurement in terms of assets and liabilities was historically regarded as a sufficient tool for liquidity risk-management. For this purpose, bank assets were classified by degree of liquidity. 'Liquid' assets, as so defined, could then be related either to overall bank assets or to certain liabilities representing a liquidity risk.

Despite its simplicity and ease of application, the stock approach has two disadvantages (OECD 1987: 90). First, it implies that the liquidity of asset items can be determined with certainty. In practice, market changes can influence the value and marketability of assets which would normally be regarded as highly liquid. In many instances, the markets for 'precautionary' assets are relatively thin and therefore liquidity can decline sharply in adverse circumstances.[82] Second, the stock approach is inherently a static one, which takes account of neither the dynamic nature of banking nor of the active risk-management activities of banks.

These considerations have induced the development of an approach to liquidity measurement which emphasises the maturity structure of bank assets and liabilities and on a measurement of liquidity based on a cash-flow concept. The maturity structure approach allows the measurement of maturity mismatching over certain periods of time, with considerable flexibility in determining the conditions under which individual assets or liabilities should be included in specific maturity categories. The cash-flow approach takes account of banking operations as reflected by the maturity pattern of its balance sheet, as well as to differentiated liquidity requirements, according to the degree of mismatching and the expected profile of future cash flows.

4.2.6.3 Regulatory Approaches to Liquidity

Although an important risk in view of the influence that liquidity may have on market perceptions, liquidity risk is but one of a number of banking risks. It consequently deserves no special regulatory treatment and should be managed like the other risks of deposit-taking financial intermediation.

Some general points can be made about the regulation of liquidity. Liquidity shortages can in principle be remedied by the emergency liquidity assistance facilities of regulatory authorities. The moral hazard problem accompanying such action could be eliminated by charging a penal interest rate that is calculated to deter banks from being exposed to excessive liquidity risk. Dale (1982: 62) therefore argues that, given the scope for such discretionary assistance, it is not clear that regulators need concern themselves with formal liquidity controls. He also points out that in a world where all deposits are covered by insurance, the issue of liquidity becomes largely irrelevant, as the link between illiquidity and insolvency is broken.

The approach favoured here is that prevention is in all cases better than cure. The mere fact that a medicine suitable to the ailment exists, need not result in reckless behaviour by the patient. Consequently, preventative (prudential) regulation should

[82] Note that there is a difference between liquidity for a bank and for the system as a whole.

be favoured above protective regulation, even if the dangers of moral hazard inherent in protective regulation can be avoided. In line with the risk-management approach to financial regulation it can simply be stated that banks are exposed to liquidity risk and that this risk should be regulated.

Protective regulation, the topic next discussed, should only come into operation when the risk-management processes of a bank have failed and the overall risk exposure of a bank is no longer adequately backed up by its financial strength.

4.3 Protective Regulation

'Any aid to a present bad bank is the surest mode of preventing the establishment of a future good bank"

Bagehot

Banking regulation cannot and should not in all cases prevent bank failure from occurring. The possibility of bank failure is necessary for the health of the financial system and the efficiency of all other economic activity. Consequently, bank failure does not always represent a failure of banking supervision.

In fact, the mere existence of protective arrangements may be a cost in terms of moral hazard and competitive neutrality, to the extent that certain institutions are perceived to be protected.

Nevertheless, when bank failure seems likely, regulatory authorities must consider the options at their disposal. Banks should, for instance, not be allowed to fail if this were to seriously destabilise the financial system. Protective regulatory measures usually consist of crisis management measures and deposit insurance.

4.3.1 Crisis Management

The unique role of deposit-taking financial intermediaries in the financial system[83] has led to the establishment of procedures for managing the problems associated with distressed banks. Crisis management procedures are devised to protect the public against the negative consequences of bank failure and to limit the risk of contagion and systemic instability. Although preventative supervision may be a powerful defence against bank failure and systemic instability, not all pressures can be avoided by prophylactic regulation. It is then that crisis management measures become operative.

One concern which must be addressed in any approach to crisis management is how to minimise the distortions in competitive conditions resulting from the involvement of the authorities. Crisis management may involve a disparity in the treatment of distressed institutions according to their relative size. Bigger institutions, sometimes regarded as 'too big too fail', are more likely to receive assistance. The more favourable treatment of big institutions may be reflected in better funding terms.

A further concern is how to prevent crisis management of distress by authorities from softening constraints on financial discipline. In the short run the problem is relatively manageable. When assistance is provided, the authorities may either take over the distressed bank and hence control the restructuring directly; or grant support conditional on specific rehabilitation measures. In the longer run, however, market discipline may be relaxed to the extent that crisis management insulates those with claims on the intermediaries, from the losses incurred. Moreover, experience

[83] See paragraph 2.3.

suggests that public ownership may tend to exacerbate this risk (Bank for International Settlements 1993: 178-179).

Crisis management can be divided into two broad headings, consisting of *emergency liquidity assistance* and *corrective action*. These measures can vary from country to country and according to specific circumstances.

4.3.1.1 Emergency Liquidity Assistance

It is a function of most modern central banks to ensure, at discount rates and penalties which they determine, that adequate liquidity is available to the financial system. However, one should distinguish between the routine operation of the discount window for standard monetary purposes and *emergency assistance* measures for deposit-taking financial intermediaries made on a more discretionary basis. It is the latter with which we are concerned here.[84]

Liquidity problems can be addressed through the provision of temporary liquidity by means of open market transactions, lending or even direct or indirect subsidies to the financial institution under pressure due to lack of liquidity. The primary consideration is to determine in which manner the liquidity is to be injected and which enterprises should be supported.

Criterion: Systemic Stability

Usually, the view taken is that liquidity assistance should only be made available to financial institutions which are temporarily illiquid but nevertheless solvent (and therefore fit for long-run survival). This is known as Bagehot's rule, after Walter Bagehot, a former editor of The Economist who more than a century ago provided central bankers with a classic guide (named 'Lombard Street') to handle the problem of ailing banks.

One approach to emergency assistance functions is that the central bank should never be concerned with the fate of individual banks, but only with the liquidity of the banking system as a whole (Humphrey 1975). The alternative approach, usually taken by central banks, is that due to imperfections in credit markets (such as an overall shortage of market liquidity), solvent but temporarily illiquid institutions may experience difficulties in finding sufficient funds from the market. This view may be based on the implicit assumption that the authorities have a better judgement of the soundness and long-term survival potential of individual financial institutions than the market. Alternatively, the authorities may be more concerned about the systemic risk which the failing of a bank might engender.

It was argued above that although liquidity and solvency can be distinguished on a conceptual basis, it is difficult for them to be completely separated in practice.

---

[84] In this regard a number of authors group both these functions under the broad heading of 'last-resort lending'. It is contended that it is more appropriate to distinguish between traditional lender of last resort functions and emergency liquidity assistance.

Generally speaking, if liquidity or solvency difficulties experienced at one or more financial institution(s) create the danger of a liquidity crisis for the system as a whole, then it is often considered the duty of the central bank to use emergency type measures in order to protect the liquidity level in the economy.

Discretion and Secrecy

Generally, there are no detailed statements of policies relating to the precise scope and nature of emergency assistance facilities - a policy known as 'constructive ambiguity'. This is done to add to the risk-taking constraints of preventative regulation. The significant differences in rules and procedures for emergency assistance reflect differences of appreciation of the role of regulatory authorities in the case of distress. Regulatory authorities must obviously intervene if a particular emergency arises that could undermine the safety of the financial system. As this would usually arise only in the case of bigger banking institutions, this may result in a general impression that a 'too big to fail' doctrine may exist. If the factors and criteria that determine assistance were specified in advance it could impose a heavy cost in terms of moral hazard. In essence, emergency assistance facilities are most powerful when they are discretionary.

4.3.1.2 Corrective Action

Corrective action may imply changes in the management of the bank, recapitalisation from existing or new shareholders, the arrangement of special interbank credit lines, assisted mergers, other ad-hoc measures which take account of the specific features or finally, the liquidation of the distressed bank.[85] Usually action that upholds some of a failed bank's activities is regarded as superior, as it provides automatic protection to depositors and also prevents a disruption of banking services by safeguarding the bank's operating structures. Since there is a significant loss in the going-concern value when banks fail, the take-over of assets by a purchaser can reduce these losses (James 1991: 1223-1242). The latter consideration is particularly important in view of the economic externalities involved in bank failures.

A device often applied in these circumstances by supervisory authorities is to place a failing bank under curatorship. The curator is tasked with either steering the failing bank back into profitability or winding it down in an orderly fashion and in a manner least prejudicial to the various stakeholders. Usually a curator will be afforded powers far in excess of those applicable to the bank management he is replacing.

If the liquidation of a distressed bank proves inevitable, liquidation proceedings may not prevent depositors from incurring losses. However, the costs of insolvency may to some extent be absorbed by the shareholders, the regulatory authorities or by deposit insurance schemes.

---

[85] For comparatively recent discussions of corrective action in the US context see French (1992), Gilbert (1992), and Parry (1992).

The Economist 1996(a): 22-23) lists various possibilities for dealing with a failed bank. These are:

- **Burial (or liquidation)**. This involves reimbursing a bank's insured depositors and disposing of its assets to assist in the payment of any uninsured creditors, including the deposit insurer itself.[86]

- **Reincarnation (or merger)**. If there remains value in a deceased bank, another bank may be willing to purchase it and take over its liabilities, possibly with some financial assistance from the supervisory authorities and / or the deposit insurer.[87]

- **Resuscitation (or state guarantee)**. A bank may be revived either by providing it with a state guarantee or by 'stripping' some of its non-performing assets off its balance sheet and placing them in a state-financial bank.[88]

- **Divine intervention (or nationalisation)**. This is the most extreme solution, reserved for occasion when a government fears that the collapse of a bank could trigger a systemic crisis.[89]

4.3.2 Deposit Insurance

Deposit insurance is intended to increase the confidence of the public in the financial system and thereby also limit the risk of financial instability. The advantage of deposit insurance schemes are the stabilising of financial markets and the possible reduction in capital requirements and overall regulatory costs. The disadvantage lies in the costs of funding, administering and enforcing the schemes, as well as moral hazard in the case of flat insurance premiums.

Deposit insurance can take a variety of forms. The following dimensions can be identified (Baltensperger and Dermine 1987: 73-79):

- compulsory versus voluntary participation;
- public versus private schemes;
- the fee structure;
- funding provisions; and
- degree of coverage.

Compulsory

A first basic question is whether or not deposit insurance should be compulsory. If the sole objective is to enable some depositors to hold risk-free deposits, voluntary insurance may be viewed as sufficient. However, the goal of systemic stability may

[86] BCCI was laid to rest in this way.

[87] An example of a bank reborn is Barings, which was bought by ING of the Netherlands in March 1995.

[88] Both France and Sweden have employed this method.

[89] The Norwegian state took over some of its country's biggest banks in the early 1990s because it feared a bank run on them.

justify a degree of compulsory insurance. Consequently, most countries have deposit insurance on a mandatory basis covering the entire banking system (but usually with a limit on individual deposits).

Private / Public

Deposit insurance systems can be either public or private (usually created on a collective basis by financial institutions themselves). Private systems are normally administered under the control and supervision of the regulatory authorities. As Benston (1983) and Kane (1987) have argued, the introduction of competition in deposit insurance schemes may encourage adaptive efficiency.

Fee Structure

A basic question of any insurance system, especially with mandatory insurance, is whether insurance fees should be flat or variable, risk-related premiums. It has been repeatedly argued in this study that risks are intrinsic to banking activity and that banks actively manage these risks. As a logical consequence of the risk-management approach to the regulation of deposit-taking financial institutions and the principle of regulatory efficiency, the adoption of risk-related premiums is strongly favoured. An efficiently organised insurer would grade insurance premiums according to a bank's exposure to risk and its capital adequacy. Such a system would minimise the negative effects of moral hazard, being the adverse incentive effects which may otherwise result from deposit insurance. Under such a system, the individual bank bears the consequence of a higher risk and lower capital ratios in the form of a higher insurance fee. If this is not the case, banks have more of an incentive to assume higher risk and / or lower capital ratios than they otherwise would have. Although this may not be so simple in reality, one should attempt to approximate such a solution as far as possible.

Arguments against this form of deposit insurance usually emphasise the administrative difficulty of calculating the appropriate fee structure. This argument does not provide a convincing justification for a flat fee structure, as even a basic differentiation amongst the major risk categories is superior to such a flat fee. It is not clear why the problem of setting adequate risk premiums is inherently more difficult in banking than in other types of insurance. Although the risk-profile of a bank may change very quickly, the same consideration applies to conventional insurance risk. In fact, the recognition that risk-taking and risk-management are central to banking activity should actually benefit the assessment of risk exposure.

Naturally, derivative financial instruments may allow the bank to considerably change its risk-profile within a short period of time. Nevertheless, the risk of inadequate internal controls can also be factored into an overall risk assessment of an institution. As Kane (1986) argues, risk-related premiums need not consist entirely of *ex-ante* payments, but may include provisions for an *ex-post* settling of insurance claims. Some economists (King *et al* 1991: 955-974) have further suggested that risk-adjusted deposit insurance premiums or capital ratios be calculated by applying option pricing models to stock market data. Alternatively, the option methodology

could be used to establish a risk-based examination schedule whereby riskier banks would be examined on a more regular basis. It could also be done by credit rating agencies. Such an examination schedule would be consistent with prompt resolution strategies since it would relate the frequency of examination and closeness of supervision with a bank's risk exposure.

Another argument against risk-related premiums points to the confidential nature of bank portfolios, which makes it impossible for banks to reveal the relevant information without giving away private information vital to their intermediary activities (Batchelor and Fitzgerald 1982). Although adequate information disclosure to the insurer is a prerequisite of such a system (as with any type of insurance), there is no need for information about individual portfolio items to become public information. However, the overall risk exposure of a bank may become publicly known under such a system. Indeed, a higher degree of transparency could improve investor confidence in a banking institution and thus promote systemic stability.

Consequently, there a strong case can be presented for a system of deposit insurance based on risk-related premiums.[90] Conceptually, under such a system the regulator could even do away with all forms of prudential regulation (i.e. capital adequacy requirements based on assets classified according to risk assessment) as both prudential aims of financial stability and consumer protection would be achieved.[91] This is in marked contrast to the case of a flat fee insurance system.

However, existing deposit insurance systems almost invariably rely on flat fees to cover deposits, regardless of a bank's risk exposure. It is significant that, starting January 1994, deposit insurance premiums in the US have been legally required to be risk-related in terms of the FDIC Improvement Act (Shiers 1994). Flat rate schemes have negative effects on economic behaviour[92] and will, in general, create an adverse incentive (or moral hazard) problem. This is the case both for depositors (who have no incentive to place their deposits with a safe institution) and bank management (which does not bear the consequence of increasing its exposure to risk and / or lowering its capital ratio). Although not empirically proven, the implication of such a system is that it may actually increase the risk of systemic instability even

---

[90] For a contrary opinion see Chan *et al* (1992) who considered the problem of designing an incentive-compatible, risk-sensitive deposit insurance pricing scheme when the insurer is confronted by private information and moral hazard problems. Although agreeing that the insurer can elicit truthful disclosure regarding portfolio risks without intrusive regulatory monitoring, these researchers argue that deposit-linked subsidies are necessary if such a system is to succeed in a competitive banking industry because of *market disequilibria*. See also Goldberg (1991: 233-239) who shows that the management of a deposit-taking institution exhibits increased risk-taking behaviour under flat rate deposit insurance. Goldberg (1991) argues that perfect monitoring or risk-based deposit insurance would eliminate this incentive if information were symmetric between bank management and the insuring agency. In the absence of symmetric information, it is argued that the only way to control the risk incentive through insurance rates is to levy a relatively high premium, which is *not considered actuarially fair*.

[91] According to Meltzer (1967), a risk-related insurance system could be voluntary, with variable coverage to be chosen by the depositor. Although this is in principle tempting to a market-orientated economist, a wide participation in such a system would be necessary to minimise the dangers of systemic instability.

[92] Giammarine *et al* (1989: 109-127) argue that flat rate deposit insurance premiums have resulted in significant cross subsidisation among banks.

above the risk when no deposit insurance is required. This is the basic reason for the co-existence of deposit-insurance schemes and other forms of prudential regulation designed to minimise the risks of bank failures.

Funding Provisions

There are some differences between various countries with regard to other aspects of *funding practices*. While most deposit insurance schemes are funded, the size of the insurance fund relative to the insured volume of deposits may vary considerably. However, the size of the fund should rather be seen in relation to the potential claims as well as the possibility of raising additional funds. Nevertheless, the capacity to make large payouts may be quite limited, thereby creating the need for discretionary backup support such as emergency assistance facilities. Some national systems may even operate without explicit funding, relying either on *ad hoc* contributions by insured banks when payouts have to be made or on the regulatory authorities as 'guarantor in the last instance'.[93]

Degree of Coverage

Possibly one of the most important differences between national systems of deposit insurance relate to the *extent of coverage*. In all systems, there exists a maximum amount per depositor and institution beyond which there is no insurance. Usually, this maximum is stated as a fixed amount, which varies considerably between countries. Although the 'small deposit' criterion is not ideally suited to protect only the less wealthy depositor (for at minimal transaction costs, wealthy depositors could divide their money amongst banks), income and wealth criteria may be too complicated to administer.

The degree of coverage has important practical consequences. On the one hand, partial coverage weakens the potentially beneficial effect of insurance on the stability of the financial system. One the other hand it may reduce the moral hazard attached to flat-rate insurance schemes by inducing greater awareness of banks' risk exposure.

Finally, it should be noted that in most cases deposit insurance does not cover all deposits and therefore the banking risks remain of concern to the regulator.

---

[93] The latter option represents an unnecessary and undesireable expansion of the role of the regulatory authorities. It is also incompatible with the principles identified in the paragraph 3.5. Competitive neutrality considerations are particularly important, as such funding arrangements would accentuate the differences between banks and non-deposit-taking financial institutions unless similar protection is also provided to the latter.

4.4 Monetary Requirements

The debate about the rationale of monetary policy and its theoretical underpinnings is well-known. Without discussing in detail the advantages and disadvantages of indirect 'market-orientated' versus direct 'non market-orientated' policy instruments,[94] it can be stated that it is now generally accepted that the costs associated with the distortions induced by direct controls far outweigh the benefits thereof. Hall (1993: 176) for instance, argues that direct controls are likely to breed inefficiency, distort the competitive balance between financial institutions and achieve only a cosmetic change in monetary aggregates.

The aspect of direct monetary requirements is included in this dissertation for the sake of completeness. It is relevant because some of these requirements on banks remain. It is argued that these are in the majority of instances inappropriate. The rejection of monetary requirements is not intended to deny that banks do play an important if not crucial role as conduits of monetary policy. However, from a prudential perspective, the rigidity of direct monetary policy instruments may actually increase the risk exposure of banks and therefore conflict with prudential regulatory objectives as banks have lesser opportunities to reduce the risks brought about by monetary controls.[95]

Monetary policy consists of decisions that are made and implemented by the monetary authorities to assist in attaining, through the influence of these decisions on the volume or composition of domestic expenditure and output or in other ways, certain broad, 'ultimate' objectives with regard to the country's economy (Meijer 1992: 287). Such *ultimate objectives* may, for example, be to maintain a stable general price level, to maintain a high and stable level of employment and to establish a satisfactorily high rate of real economic growth.

In order to bring about the ultimate objectives of their policy the authorities are likely to adopt *intermediate objectives* which consist mainly of targets or guidelines in respect of one or more of the following (Stals 1991: 9):

- the rate of increase in the money supply;
- the rate of increase in the total credit extension of banking institutions;
- the level of interest rates;
- the level of gold and foreign-exchange reserves; and
- the exchange rate of the currency.

---

[94] The topic has been discussed *ad nauseam* in almost all standard works on monetary policy.

[95] Interestingly, prudential regulation may impact negatively on monetary policy. Brinkmann and Horvitz (1995) argue that the failure of the US banking system to play its normal role in the transmission of the monetary stimulus to the economy may have contributed to the 1990-91 recession and the sluggish recovery from it. Their paper examines the 1988 Basle Agreement on risk-based capital standards as a possible shock to the credit supply system and finds that US banks with larger capital surpluses resulting from the risk-based requirements had faster loan growth between 1987 and 1991 than those with no surpluses or which failed the new standards.

Monetary policy can be conducted by means of direct, non market-orientated or indirect, market-orientated *policy instruments*. Indirect, non market-orientated measures seek to guide, tempt or coax participants in financial markets into appropriate lending and borrowing behaviour. They do so by creating price and interest rate incentives in the financial markets to which the private market participants respond spontaneously and voluntarily. Meijer (1992: 294) therefore argues that the authorities' deficit financing, public debt management, and open market transactions, the central bank's buying and selling in the foreign exchange markets, and the central bank's discount policy can truly be regarded as the only market-orientated policy instruments.

In contrast, direct, non market-orientated measures essentially involve the monetary authorities prescribing to banks, other financial institutions and market participants what to do as regards their lending, borrowing and investment activities. Failure to comply with these controls may render the private market participant liable to some form of penalty or sanction. Direct monetary controls, include deposit and / or lending *interest rate controls*, *variations in reserve asset requirements,* the imposition and variations of *quantitative restrictions on bank lending* (credit 'ceilings') and the *allocation of credit by regulation*.

4.4.1 Variations in Reserve Asset Requirements

In many financial systems minimum reserve requirements were initially introduced for prudential reasons, namely to ensure the adequate liquidity of banks. However, the minimum reserve requirement has evolved to become a monetary policy tool, which has a dual function. Firstly, it serves as an instrument of ongoing liquidity management in the money market, and secondly, it acts as an automatic constraint in the money creation process (Van Greuning 1993: 263).

Reserve asset requirements[96] may form a direct or an indirect instrument of monetary policy. Within a market-orientated framework of monetary policy, it is the fixed nature of reserve requirements that facilitates the use of other indirect policy instruments by monetary authorities (McCarthy 1988: 186). As a direct instrument of monetary policy, *variations* in reserve asset requirements are used as an operating variable to influence the money supply.

The philosophy behind variable reserve assets as a direct monetary instrument is essentially simple. Banks are required to hold a statutory minimum amount of reserve assets that is normally calculated as a percentage, or the sum of various percentages, of their various liabilities to the public. Because bank liabilities cannot be more than a certain multiple of their reserve assets, these requirements set a potential maximum to the banks' total liabilities and assets. Monetary control in this kind of system depends on the ability of authorities to regulate the supply of the banking system's reserve asset base. Variations in the reserve asset requirements of

[96] Although similar in some practical respects, reserve assets requirements and liquidity adequacy requirements are distinguished in conceptual terms in this study; the former being primarily an instrument of monetary policy, the second concerned with principles of prudent portfolio and risk-management.

banks should only be temporarily employed in situations in which authorities have unintentionally allowed the banks' reserve asset base to expand or contract too much or too rapidly. Eventually, corrective action will have to be aimed at the reserve asset base itself (Meijer 1992: 314).

The important point to note is that reserve assets are no longer required from a risk perspective as the liquidity risk-management activities of banks will be governed by regulations related directly to liquidity risk.

4.4.2 Interest Rate Controls

Another form of direct monetary controls is the control of deposit and lending interest rates. The control of interest rates limits price competition among financial intermediaries and usually leads to increased reliance on substitute forms of competition, such as the provision of free (or underpriced) services to depositors, increased branching or advertising. Interest rate regulations can create serious distortions when the determined rates are not in accordance with market rates (Baltensperger and Dermine 1987: 84).[97]

From a prudential perspective, interest rate controls may increase risk exposure by (Australian Government Publishing Service 1981: 309):

- impairing the flexibility of banks to adjust to changing market conditions, to the extent that they are unable to increase the rate that they can charge on a substantial proportion of their loans, and their ability to compete for deposits is impaired (i.e. increased interest rate risks); and
- inhibiting their ability to charge fully for the risks inherent in various loans and thereby increase credit risk.

Consequently, both from a prudential and a monetary policy perspective, the general tendency is to place reduced reliance on this type of regulation in favour of market-orientated policy measures.

---

[97] A basically similar situation can result from the setting of cartel rates, although the flexibility of such rates with respect to underlying market conditions is probably greater than in the case of regulated rates. The US provided a good example of the negative effects of interest rate controls by means of Regulation Q, which placed a regulatory interest rate ceiling on deposits. The American Savings and Loans (S&Ls) industry was prevented from granting adjustable rate mortgages (ARMs) but historically funded itself by means of short-term deposits where interest rates are adjustable. In September 1969, the US Congress enacted the Interest Rate Control Act, extending Regulation Q (which had previously only applied to commercial banks) to S&Ls and effectively placed a ceiling on the interest payable to S&L depositors. During 1979 - 1981 US interest rates soared in response to rising oil prices and inflationary expectations. The surge in interest rates drastically reduced the market value of fixed-rate mortgages. Until 1981 depositors neutralised the effect on S&Ls by their willingness to accept deposit rates which were much lower than market rates. By late 1981, however, regulatory ceilings on deposit interest rates could no longer solve the interest rate problems of the S&Ls, as depositors had no access to an attractive alternative - money market funds (Steward 1993: 38-39). Burdened by sharply higher funding costs, at least 85 per cent of all S&Ls lost money in 1981, the aggregate net operating loss for the industry being $7,1 billion. By 1982 the capital of all S&L institutions was completely eroded and nearly all the institutions had large negative net worths when their assets and liabilities were valued at actual market rates (Steward 1993: 39).

The determination of maximum lending rates is sometimes intended to serve the essentially social purpose of protecting poorly informed and relatively defenceless borrowers against exploitation, such as provided by the South African Usury Act. Although it was argued that social aims should not form part of a regulatory policy, it is contended that the aim of protecting loan customers can be attained without sacrificing market orientation. This can be effected by linking maximum lending rates to some benchmark market rate.[98]

The setting of maximum interest rates poses a problem in providing banking services to the informal sector (such as in South Africa) while retaining market orientation. As Schoombee and Smith (1995: 1) indicate, the informal sector displays a combination of high risk, high cost and low returns, thereby discouraging formal banks from trading with this sector.

Furthermore, even if banks are allowed to charge higher interest rates which take into account the higher cost of operating in the informal sector, banks are still generally reluctant to provide credit to the informal sector. The solution, therefore can only be found in reducing the perceived and inherent risk; as well as the costs attached to these loans.

Schoombee and Smith (1995: 13-14) provide a number of ways in which government can assist banks to reduce risk and costs. These are: providing start-up subsidies; safeguarding depositors against losses in the case of bank failure to induce greater propensity to deposit funds in banks; reducing information cost (by for instance infrastructural development) in the informal sector markets; and setting up an appropriate loan guarantee scheme. However Schoombee and Smith (1995: 14) stress that world-wide experience suggests that government subsidies to bank credit with the intention of lowering interest rates to the informal sector have been a failure. Banks were initially attracted by high margins, but withdrew due to disappointment when higher than anticipated default rates occurred.

4.4.3 Credit Ceilings

Quantitative restrictions on bank lending take the form of requests or directives to banking institutions in terms of which the banks' lending or extension of credit to specified borrowers, in specified forms, or for specified purposes is not to exceed a certain maximum amount (Meijer 1992: 317).

As in the case of direct interest rate controls, the imposition of credit ceilings may induce a process of financial disintermediation. Because credit ceilings imply a limitation of bank lending it may, in principle, be possible for banks to charge a higher

[98] More comprehensive consumer protection legislation should be such that (Australian Government Publishing Service 1981: 399) new entry is feasible; there remains effective and equitable competition amongst credit providers; there is full disclosure to borrowers of *relevant* information, particularly in respect of effective cost (interest and any other charges); the cost and availability of consumer finance are not impaired; and emphasis is placed on the development of consumer education and counselling programmes.

rate on the restricted amount of lending. This would increase the average rate of return on their total assets. Consequently, credit ceilings are usually accompanied by interest rate controls. One of the aims for the institution of credit ceilings may even be a lower level of general interest rates, which would correspond to monetary and credit restrictiveness. The response of banks that are forced to lend only a restricted amount at rates below the market equilibrium will probably be to attempt to lower the rates offered on their deposits. When official deposit and lending rates are not in accordance with market forces, dissatisfied depositors and unsatisfied borrowers are likely to bypass financial intermediaries in the non-bank-intermediated credit markets. The resultant increase in the 'disintermediated' provision of credit reduces the effectiveness of credit ceilings as a restrictive monetary policy instrument.

A further effect of disintermediation may be the growth in inter-company lending with or without off-balance sheet finance, e.g. banks endorsing the paper issued by companies.

Credit ceilings also inhibit the absolute and relative growth of banking institutions, hinder competition between banks, and prevent the efficient extension of credit. The existence of credit ceilings may result in arbitrary decisions by regulatory authorities, *inter alia* when new institutions seek to enter the credit market. Finally, credit ceilings may impose a cumbersome administrative burden upon regulatory authorities (Meijer 1992: 318).

The prudential implications of credit ceilings are unexplored. If banks are only allowed to extend a certain amount of credit one would expect the banks to charge a higher return on these assets (in the absence of interest rate controls). This would imply a move into riskier assets where higher rates are justified. Should interest rate controls not permit extending loans with higher margins, banks would probably lend to borrowers with the lowest credit risk at the maximum allowable interest rates. This would reduce risks in the banking system but transfer the risk to the disintermediated lending entities who would be assuming higher credit risk.

4.4.4 Allocation by Regulation

Allocation by regulation involves the imposition by the monetary authorities of formal or informal maxima or minima on the amounts of the banks' lending to certain specific borrowers or categories of borrowers, or for certain specific purposes (Meijer 1992: 319). An example of this type of regulation is the requirement that banks invest a portion of their funds in certain prescribed assets. Allocation by regulation shares many of the disadvantages of direct quantitative credit controls.

Allocation by regulation forces deposit-taking institutions into less-preferred and inferior portfolio compositions from a risk-return perspective, thereby affecting the ability of banks to compete in the deposit markets. It may be difficult to ensure that favoured credit facilities are not abused by their beneficiaries and that credit extended for favoured purposes is in fact used for these purposes only. The attainment of social or other non-monetary aims are therefore best achieved by fiscal policy and not by means of allocation by regulation.

4.5 Summary and Conclusion

Table 4.1 provides a summary of the components of prudential regulation. The various measures which are undertaken by regulators of deposit-taking institutions are related to certain risk objectives.

Table 4.1 Prudential Regulation - A Summary

Component	Measure(s)	Risk objective
Entry requirements	• Minimum capital • Fit and proper management	Ensuring the soundness and risk-management ability of new institutions
Permissible business activities	Restrictions on • Property investments • Equity participation • Interbank equity participation • Insurance business • Securities business	Limiting / preventing the risk exposure of banks to certain activities
Disclosure in financial statements and supervisory returns	Disclosure of all information relevant to assessing the risk exposure of banks	Determining the level of risk assumed and managed by banks
Role of auditors	Imposing additional responsibilities on auditors	Ensuring adequate risk assessment and disclosure
Capital adequacy	Requiring a capital base commensurate with the overall level of risk assumed	Limiting the risk of bank failure
Risk asset limits	Limitations on • Credit risk • Interest rate risk • Foreign exchange rate risk • Off-balance sheet activities	Controlling the risk attached to the portfolio of banking assets
Liquidity risk	Limitation on liquidity risk	Ensuring that banks are able to meet their funding commitments

The research problem of this study holds that modern regulatory frameworks conform closely to the risk-management activities which are part and parcel of modern banking. This Chapter has examined the various components of banking regulation within an original framework, derived from the theoretical rationale of financial regulation, which is the achievement of consumer protection and overall financial stability by regulating the risks inherent in banking activity. The central theme of risk-management by banks was evident throughout and thus supports the above research problem.

The regulation of deposit-taking financial institutions can embrace a number of objectives. Banking regulation can be designed to protect the consumers of banking services, mainly being depositors; to regulate banks for the purpose of ensuring the overall safety and soundness of the financial system; and to facilitate the role of the banking system as the conduit for monetary policy actions.

The direct regulation of banking institutions and their financial risks to ensure financial stability can be divided into two broad categories which have been

described as *prudential* regulation and *preventative* regulation. Preventative bank regulation is intended to prevent excessive risk-taking by banks and thereby reduce the likelihood of bank insolvency. Protective regulation has the purpose of providing support to both banks and / or their depositors should problems arise.

It was demonstrated that **prudential regulation**, which is aimed at controlling the levels of risks assumed by banks, relates to supervision regarding *inter alia* the entry requirements, the range of business activities, the required quality and quantity of financial information, the adequacy of capital resources, the portfolio restrictions on risk assets and the sufficiency of liquidity pertaining to the banking sector.

Bank failure does not necessarily represent a failure of preventative regulation. **Protective regulation** seeks to offer protection to depositors and / or deposit-takers. Table 4.2 is a summarised version of the components of protective regulation and indicates how the regulatory measures undertaken are in line with specific risk objectives.

Table 4.2 Protective Regulation - A Summary

Component	Measure(s)	Risk objective
Crisis Management	• Providing emergency liquidity assistance • Corrective action	Reducing the risk of systemic instability
Deposit Insurance	Allowing / requiring a deposit insurance scheme	Protecting consumers from the risk of losing funds and reducing systemic risk

Direct monetary requirements create monetary distortions and also adversely influence banks' risk exposure. Consequently, these should be avoided from a prudential as well as a monetary perspective. Table 4.3 summarises how direct monetary regulations can impact negatively on the risk-management activities of banks.

Table 4.3 Monetary Requirements - A Summary

Direct monetary measure	Risk impact
Variations in reserve asset requirements	Not necessary for the regulation of liquidity risk
Interest rate controls	May increase interest rate and credit risk
Credit ceilings	Disintermediation of risks from banks to other financial institutions
Allocation by regulation	Inferior risk asset portfolio composition

In the following country-specific Chapters it will be shown that each regulatory framework takes account of the risks outlined above. Hence it will be demonstrated that in practice, the regulation of banks is concerned with the risk-management activities of banks. From a theoretical point of view, supervisors should not only view the risks individually, but also focus on the overall risk exposure of a bank in relation to its capital base. The 'portfolio' approach, which takes cognisance of the overall riskiness of a banking portfolio, is considered best suited for this purpose.

SECTION B

A COMPARITIVE ANALYSIS OF FINANCIAL REGULATION IN SELECTED FINANCIAL SYSTEMS

CHAPTER 5

SELECTED FINANCIAL SYSTEMS

5.1 Introduction

This Chapter is concerned with the three financial systems that are the focus of this study, being the UK, Germany and South Africa. First, the motivation for selecting these systems are discussed. This is followed by an overview of the structure of each system with reference to the deposit-taking institutions and the financial markets in which they operate. Whereas the deposit-taking institutions are categorised according to the respective domestic conventions, the financial markets are reviewed in a more standardised fashion. The following markets are covered: money markets, capital markets, foreign exchange markets and derivative markets.

The effect of financial regulation cannot always be contained within domestic markets. Accordingly, the Chapter includes, as a final paragraph, an excursion into the truly international Euromarkets, which have developed mainly to escape regulation in domestic markets.

5.2 Motivation for Selection

The choice of the three specific financial systems in order to perform a comparative analysis of their respective *modi operandae* of financial regulation should be seen against the background of the dramatic structural changes generally affecting national financial systems, which were described at the outset.[99] These structural trends were said to be universal, influencing the evolution of all financial systems, differing only as to their extent and intensity amongst the various financial systems and in their elicitation of regulatory responses.

The aim of the comparison lies not in superficially comparing structures and experiences with one another; the aim is to compare, to analyse and to illustrate the underlying principles contained within the systems whilst taking into account the broader theoretical context. A comparative analysis of national financial systems therefore involves elements of similarity as well as dissimilarity. Academic soundness requires that the inceptual conditions for the economic 'experiment' be consistent as far as possible. This implies that the financial systems being compared should show a reasonable degree of *similarity* not only with respect to their inherent features but also with respect to the forces driving structural change such as globalisation,

[99] See paragraph 1.1.

innovation, changing technology, changing business objectives and most importantly the factors of competition and deregulation.

At the same time, meaningful analysis of the topic will benefit greatly from some degree of *differentiation* with regard to the structure of financial intermediation and intensity of financial regulation.

Comparative financial studies with a South African point of departure have often focused on the similarities between the financial systems and policy approaches of the US, the UK, Canada, Australia and South Africa.[100] The approach adopted here is identical in the sense that it also stresses similarities (hence the selection of the UK). The financial system of the UK is generally regarded as the *fons et origo* of the South African financial system and as such it has heavily influenced the historical development thereof (Schoombee 1991: 2). In addition, the UK supervisory practices are held in high regard by regulators worldwide and British regulatory experiences often serve as examples to South African supervisors.[101]

However, the approach adopted here differs (in the selection of Germany) in an attempt to obtain a greater degree of differentiation. In addition to the structural complexity of the German banking system, the degree of scope afforded German banks, the supervisory, regulatory, and monetary environment in which German banks and financial markets operate, differ significantly from that of banking systems in many other countries. These differences result in important distinctions in the role played by banks in intermediating between savers and investors, and in the incentives faced by bank management and supervisors.[102]

Indeed, the differences between financial systems as regards their respective *structure of financial intermediation* are attracting increasing academic interest. Germany and the UK in particular, each represents a distinct model of *corporate governance* (The Economist 1994: 2-11). The British model of corporate governance emphasises the importance of liquidity in the stockmarket. Shareholders monitor the management of public companies through stockmarket trading. The system is underpinned by fairly full disclosure of financial data, and by strict laws on insider trading.

The German model of corporate governance, on the other hand, relies less on liquidity, as many medium and especially small German companies are privately owned. Shareholders reduce their risk by closely monitoring the management of

---

[100] See for instance Schoombee (1991: 2).

[101] Interview with Dr. J.H. van Greuning, Registrar of Banks and Head of the Bank Supervision Department, South African Reserve Bank, 5 January 1994.

[102] Oelkers (1995) recently completed a comparative study of the Bundesbank Act and the South African Reserve Bank Act (including liability in banking supervision). The reasons cited by Oelkers (1995) for the selection of Germany to compare the law of central banking are twofold. Firstly, the fact that South Africa is now a federation, but with a centralised state structure and Reserve Bank. As Germany has a federal structure it may serve as an example. Secondly, s.35(1) of the South African constitution states that the Constitutional Court can refer to comparable foreign case law in interpreting the fundamental rights, and Germany would be an appropriate country in such a case.

companies, or by having a bank monitor on their behalf. Banks consequently forge close, long-term relationships with most industrial companies. Generally, the disclosure requirements of companies are less demanding and accounting information less revealing in Germany.

The two models also reflect differences in the *type of owners* of corporations. Although banks in the UK are permitted to own shares they have historically largely refrained from doing so. Until the 1930s, British banks owned few non-banking assets and avoided the risk of participation in equities (Black and Coffee 1994). Also, from the 1930s to the 1970s, the Bank of England 'discouraged' bank ownership of shares.[103] In Germany, however, the biggest shareholders in public companies are banks and firms that have close business links with the companies they own. Banks have been at the heart of German corporate governance at least since the era of Otto von Bismarck, who used them in order to promote economic growth. Starting as lenders, German banks became big shareholders when the firms they had earlier financed either went public or defaulted on their loans during the economic crises following on the two World Wars, such as the 1929 Great Depression.

German banks are often criticised for the *massive power* they exercise not just through their own equity participations but also by casting proxy votes for individual shareholders who entrust their shares to their bank. Although shareholders are able to instruct banks how to vote, the usually refrain from doing so. With proxies and own shares combined, the three biggest German banks - Deutsche Bank, Dresdner Bank and Commerzbank, wield a majority of votes at the shareholders' meetings of many firms. They monitor (and sometimes control) management both as lenders, and, as shareholders, by electing representatives to supervisory boards which have the function of overseeing German companies.[104]

Although there is no agreement on the best system, there now seems to be agreement that corporate governance does indeed affect economic performance (The Economist 1994: 5).

Whereas the German and UK models of corporate governance can be regarded as opposite ends of the spectrum, the South African structure of financial intermediation incorporates elements of both approaches. On the one hand, the South African system of corporate governance is characterised by low stockmarket liquidity. On the

---

[103] Resulting in a morally suaded UK counterpart of the US Glass-Steagal Act which expressly prohibits banks from owning large equity stakes in companies.

[104] This may misrepresent German banking for the following reasons that: the number of German firms a bank can control, although significant, is limited; although most of the largest 100 firms have a bank member on their supervisory board, this does not imply effective bank control; the role of the banker in the supervisory board has to be viewed in light of the rigorous legal standards of corporate governance on German public firms; bank ownership of industry is not pervasive, but is limited to a few special cases and has decreased during the last decade; and that proxy voting is more important than stock ownership as a potential means of control. See Edwards and Fischer (1994) who argue that German banks are not as powerful as they seem, because bank lending is not an especially important source of finance for German firms; supervisory boards meet no more than four times a year; banks have not used their proxies to elect as many representatives as they could; and those they do elect behave as advisers and not controllers, though they may do more if a firm is in trouble.

other hand, banks are not typically engaged in equity participations of industrial companies and are not generally regarded as being as powerful as their German counterparts.[105]

Another conceptual feature of the German financial system that is analytically useful, especially as regards considerations of competitive neutrality, is the German model of universal banking[106]. The South African approach to the provision of financial services approximates this 'Allfinanz' model, rather than the historically somewhat more restricted UK version (Oosthuizen 1994(a)).

It is also interesting that UK and German banking are considered the least expensive in the world market because they can offer their services at an overall interest spread of 2 per cent of total assets (Leichtfuss and Simon 1995: 176). This contrasts markedly with the South African banking industry which enjoys margins in excess of 4 per cent of total banking assets.

Finally, as will be seen in Chapters 7 and 8, Germany and the UK have differing deposit protection schemes. Britain has a statutory deposit protection scheme that is in effect compulsory; Germany's is private and voluntary. The design of these systems is of specific interest to South Africa which has no explicit deposit insurance arrangement.

The general thrust of this study - to illustrate that existing regulatory structures and practices reflect supervisory concern with the risk-management activities of banks - is well suited to a comparative approach which stresses both similar experiences as well as allowing for differing regulatory responses.

The following paragraphs are concerned with the structure of the three selected financial systems and are intended to provide a basic overview thereof. In each case, the financial institutions engaged in deposit-taking activities are discussed, followed by an appraisal of the main financial markets. In order to provide some perspective on the dimension of each system, reference is also made to the size and importance of the institutions and markets concerned. However, statistics are employed sparingly as the aim is to provide a functional rather than a quantitative comparison.

---

[105] It is, however, noteworthy that the four biggest South African banking groups (Amalgamated Banks of SA (ABSA), First National Bank Holdings, Nedcor and the Standard Bank Investment Corporation (SBIC)) are controlled by the major insurance groups (SANLAM, Southern Life Limited, SA Mutual and Liberty Life Limited respectively) and / or indirectly by the corporate giants (Anglo American Corporation Limited and the Rembrandt Group) which together wield a remarkable degree of power over publicly listed companies. Ironically, one of the major causes of this concentration of economic power has been financial regulation itself, i.e. exchange control regulations which have prevented the free flow of capital.

[106] Universal banking involves the grouping together of a variety of deposit-taking and even non-deposit taking financial intermediaries into a single banking institution. The most important implication of this model is that, theoretically, the opportunities for regulatory arbitrage are reduced.

5.3 The UK Financial System

5.3.1 Financial Institutions

A concise description and classification of British financial institutions is complicated by the rather ambiguous and overlapping roles of many of the financial institutions. However, relatively recent legislation (the Trustee Savings Bank Acts of 1976, 1978, and 1988; the Building Society Act of 1986; the Financial Services Act of 1985; and the Banking Act of 1987) has somewhat clarified the situation.

Banks in the UK can be divided into three main groups (Table 5.1): 220 commercial banks who together hold 41,7 per cent of total bank assets, 362 foreign banks which hold a remarkable 56,9 per cent of total bank assets; and 138 other deposit-taking institutions which hold the remaining 1,4 per cent of total bank assets.

Table 5.1 The UK Banking system - August 1996

Type of banks	Number of institutions	Total assets (£ billion)	Percentage of total bank assets
Commercial banks			
Retail banks	21	710,7	36,2
Merchant banks	31	46,1	2,3
Other British banks	168	61,9	3,2
Total	220	818,7	41,7
Foreign banks			
American banks	44	158,9	8,1
Japanese banks	29	198,5	10,1
Other overseas banks	289	760,3	38,7
Total	362	1117,7	56,9
Other deposit-taking institutions			
Discount houses	8	25,1	1,3
Building societies	78	2,3	0,1
Total	86	27,4	1,4
Total banking system	668	1963,8	100,0

Source: *Bank of England (1996(b)).*

The total banking assets of £ 1 963 billion far exceed the GDP of the UK which amounted to £ 586 billion in 1995.

5.3.1.1 Commercial banks

Commercial banks in Britain can be subdivided into retail banks, merchant banks and other British banks.

Retail banks consist of the clearing banks, the Trustee Savings Banks, the Co-operative Bank, the National Girobank and the National Savings Bank.

Clearing banks are dominated by the so-called Clearers, primarily the 'big four' - Barclays, Midland, National Westminster and Lloyds. The 'clearing' appellation is of historical importance only, reflecting the once dominant role of these banks in the British money transmission and payments networks. The 'big four' commercial banks have extensive nationwide branch networks. During the 1970s and 1980s this group expanded and diversified their activities into overseas operations, the home loan market, and investment banking, and hence became universal banks. However, unlike their German counterparts, they do not hold major equity participations in industrial corporations.

The TSB (Trustee Savings Banks) group was created in 1985 as a holding company for its constituent members, who originated in the last century as public service trusts. During the 1960s they diversified away from small personal savings banks towards retail banking, and then into commercial banks. It is now the eighth largest bank in the UK.

The Co-operative Bank, recognised as a clearer in 1975, is owned by 100 retail co-operatives and acts in a more limited manner, primarily providing personal banking services and local authority financing. The Co-operative Bank has a relatively small but expanding branch network.

The National Girobank (NG) and National Savings Bank (NSB), modelled after the European giro systems, provide various money transmission banking services, mainly deposits and cash withdrawal facilities, through post office branches throughout the UK. In 1986 NG announced that it would offer mortgages. The NSB also offers various savings bonds and certificates and invests mostly in government securities. In 1990 the NG was sold to Alliance and Leicester Building Society.

Merchant banks comprise banks involved in both wholesale banking and investment banking, including corporate finance. Recently, their deposit-taking and credit extension has been of less importance than other activities, such as international trade finance, mergers and acquisitions, financial advisory services, investment management, foreign exchange, and securities trading. The core members of this group include the 16 former 'accepting houses', who long enjoyed a special relationship with the Bank of England.

Other British banks include miscellaneous UK registered institutions, institutions in the Channel Islands and Isle of Man, British overseas banks, and finance companies. Some of the Channel Islands and Isle of Man institutions are treated as UK banks for statistical purposes, yet are not authorised under the 1987 Bank Act.

5.3.1.2 Foreign banks

Foreign banks from 78 countries operating in London numbered 362 at August 1996, including 259 branches, 69 subsidiaries, and 18 consortiums. There are also 184

representative offices of foreign banks, 55 from the US, 32 from Japan, and 92 from EC countries. Whilst a few are active in retail banking, the majority concentrate on the corporate and wholesale banking markets. Foreign-owned banks held 56,9 per cent of the UK banking system's total assets at August 1996, but only 27,4 per cent of Sterling deposits. Foreign banks are especially prominent in the Euromarket and in the UK securities market. The attraction of the London market to Japanese and US banks lies in the opportunity to engage in security business, which they are prohibited at home.

On the whole, UK banks have emerged relatively unscathed from deregulation due to the small gap between the capabilities and size of new entrants and existing banks; established placing power in Europe; stronger client loyalty; and the existing experience of UK banks in competing internationally (Schoenmaker 1995).

5.3.1.3 Other Deposit-taking Institutions

Other deposit-taking institutions are the building societies and discount houses.

As was the case in South Africa, UK **Building societies** originated as mutually-owned mortgage societies. By August 1996 there were some 78 of these institutions, operating a large network of branches. Traditionally, building societies obtain funds from depositors and finance home purchases. However, they are increasingly in competition with the clearers in both commercial banking services and mortgage lending. The 1986 Building Societies Act extended their permissible activities and building societies now offer insurance, credit cards, money transmission accounts, personal banking, and non-financial products. Societies are allowed to expand the non-mortgage element of their business by stages to a maximum of 25 per cent of their total commercial business. Even though the 1986 Act allows for a degree of competition with banks, in 1989 Abbey National, the largest building society, elected to go public and to obtain a banking licence. This trend has continued and since 1989 (when there 130 building societies with 13,1 per cent of total assets) a great number of former building societies have elected to become banks in order to be able to compete on an equal footing.

The eight **discount houses** still play a unique role in the UK banking system, acting primarily as intermediaries between the Bank of England and the rest of the banking system and play an important role in the implementation of monetary policy[107]. Most discount house funds are obtained through the short-term money market and invested in short-term assets[108].

---

[107] A general shortage or surplus of funds (arising from net movements of money into or or out of the banking system) will end up in the discount market. If it is at a shortage, the market will rely on the Bank of England for 'lender of last resort' assistance. If there is a surplus of funds, the Bank of England will usually be willing to absorb this by selling bills in order to prevent undesired short-term fluctuations in interest rates. For an in-depth analysis of the role of the money market in UK monetary policy see Schoombee (1991: 104-159). Suffice it to note that it is by variations in the terms on which the Bank of England buys or sells bills (or refuses to buy or sell bills) from discount houses, that it exerts its influence over short-term Sterling interest rates.

[108] The distinction between banks, building societies and discount houses is no longer operative in South Africa, see paragraph 5.5.1.

5.3.2 Financial Markets

The city of London is one of the prime financial marketplaces in the world, boasting highly sophisticated and largely deregulated financial markets. The following London financial markets[109] are considered below: the money market, capital market, foreign exchange market as well as the newer derivatives market.

5.3.2.1 The Money Market

A traditional money market is the **discount market**. Each of the commercial banks operating the national payments mechanism needs to be able to finance deficits or absorb surpluses as they arise from the daily clearing. In order to do so without holding unnecessarily high levels of non-interest earning balances at the Bank of England, these banks usually hold money at call with discount houses. The bills traded in the discount market are mainly treasury bills[110] and commercial bills[111]. The Bank of England has consistently preferred to conduct open market transactions in the bill market and by dealing largely with discount houses rather than, in most countries, by direct transactions with banks.

Other most prominent instruments of the London money markets are certificates of deposit, Sterling Commercial Paper and ECU Treasury Bills.[112]

Certificates of deposit (CDs)[113] are negotiable instruments in bearer form issued by banks as evidence of a deposit of a fixed sum at a stated rate of interest and due for repayment on a stated date. Ownership of CDs changes on delivery; there are no

---

[109] For a more detailed, but less recent survey than presented here, see Harrington (1991: 260-312).

[110] Treasury bills are marketed by the Bank of England through a weekly auction on behalf of the UK government. They are normally of 91 days' duration and are issued in amounts ranging from £5.000 to £1.000.000. Treasury bills do not pay explicit interest but are sold and subsequently traded at a discount prior to redemption at par. Given their short duration and the fact that they are backed up by the security of the UK government, they are regarded as low-risk assets.

[111] Commercial bills are usually drawn under an acceptance credit facility granted by a bank to one of its corporate clients. The client draws a bill on its bank requiring the bank to pay a specified sum at a stated date in the future. The bank accepts the bill, i.e. confirms by endorsement of the bill that it will make the payment on the due date. Provided that the bank is on the Bank of England's list of eligible banks, the bill becomes eligible for rediscount at the Bank of England. It is then a highly liquid asset and can be sold at a discount to a bank or discount house. Accepted commercial bills are known as bank bills or bankers' acceptances.

[112] Another commonly used instrument in the London money market, which conceptually is a part of the Euromarkets, (*vide infra* paragraph 5.6) is Euro-commercial paper (ECP). ECP comprises short-term bearer instruments that are issued by large companies, by public authorities (including some national governments) and by international organisations. ECP issues are managed by dealers (banks and security houses). Dealers place paper with investors, and although in principle it is negotiable, in practice there is little secondary trading. Unlike the position in the US commercial paper market, there is no requirement for a credit rating for issues of ECP, although an increasing volume of issues are now being rated.

[113] CDs are issued primarily in Sterling and in US dollars, for periods ranging from the very short term (a minimum of 28 days in the case of Sterling CDs) to five years but the majority of issues and the most active secondary trading are concentrated at the shorter end: six months or less. CDs are issued at par and are subsequently traded on a yield to maturity basis.

endorsements and no contingent liability rests with the seller. The secondary market is composed of large banks plus discount houses. Their purchases of CDs involve credit risk as with any other form of lending, and so will be counted against the individual limits set for lending to other banks. The main advantage of a CD is that it provides the issuing bank with term funds while for the purchaser (depositor) it is a highly liquid asset. Purchasing a CD is also an alternative to interbank lending.

In 1986, the Bank of England allowed certain companies to issue *Sterling commercial paper* (SCP) with maturities of 7 - 364 days, exempt from the Banking Act restrictions on the taking of deposits.[114] Programmes are managed by (mostly UK-owned) banks who issue paper and act as market-makers. The development of secondary markets in SCP has caused the share of outstanding paper held by banks to fall to low levels.

Commencing in October 1988, the Bank of England issued a series of treasury bills denominated and payable in the European Currency Unit (ECU).[115] These *ECU Treasury Bills* are issued by tender in monthly intervals and have maturities of one, three and six months. A number of institutions are tendering for these bills and an active secondary market has developed.

The **interbank market** is the largest of the short-term financial markets in London and an integral part of the global interbank market. The market is an over-the-telephone market in short-term deposits denominated in a range of different currencies. Deals are commonly arranged through money brokers, but there is also direct dealing between banks. The market fulfils a number of roles. Short-term interbank deposits with a near maturity date are a prime source of liquidity for the depositor bank. Equally, however, the ability of the same bank to borrow funds itself is a further source of liquidity. The market offers great flexibility to banks in managing assets and liabilities. Normally short-term borrowing and lending can be revolved so that, in effect, the interbank market can serve as a long-term source or outlet of funds. In order to gain access to the interbank market, each bank must establish and maintain creditworthiness. Banks normally set limits on what they will lend to other banks and these will vary as perceptions change.

The **wholesale deposit market** is the market in large deposits from non-bank sources, predominantly large companies. Because interest rates on wholesale funds are determined competitively, all large non-bank deposits are remunerated at market rates of interest - which are normally close to and vary with interbank rates. Corporate treasurers deal with a number of banks and move funds in response to the terms offered.

---

[114] The stringent conditions initially imposed on SCP issues were relaxed significantly in 1989. The size requirement of companies was reduced from a net asset value of £50 million to £25 million and the minimum denomination of issue was cut from £500.000 to £100.000. The maximum maturity of SCP was raised to five years and the range of permissible borrowers was widened considerably.

[115] The advantage of these issues to the Bank of England is that they add some short-term flexibility to government foreign currency borrowing, to the management of foreign exchange reserves, as well as providing a potential reduction in the debt service cost of foreign borrowing.

derivatives exchange is LIFFE (the London International Financial Futures Exchange).[119]

LIFFE began trading *financial futures* in 1982. LIFFE now offers the most comprehensive range of contracts of any financial futures or options exchange in the world, reflecting the breadth of London's underlying international banking, securities and commodities business.

Turnover in futures trading on LIFFE has increased steadily since its inception. In 1983, the first full year of trading, the average daily number of contracts was around 10.000; by 1986, this had risen to about 25.000. On 16 September 1992, trading on the LIFFE for the first time exceeded that of the longer established Chicago exchanges, which pioneered the development of futures and options (Bank of England Quarterly Bulletin 1992: 476). Presently LIFFE is the worlds third largest exchange behind CBOT (the Chicago Board of Trade) and CME (the Chicago Metals Exchange) with just over 30 million contracts traded in the last quarter of 1995 (Bank of England 1996(a): 27).

Options, which may take the form of currency options, share options or share index options, are bought and sold in London in two ways. Over-the-counter (OTC) options are mainly options to buy or sell foreign currencies and involve transactions amongst banks and between banks and their clients. Second, traded options are standardised contracts which are traded on organised exchanges.

The growth in options markets reflects an increase in their use both by non-financial companies and financial institutions. Non-financial companies have become more sophisticated in hedging risks, notably foreign currency risks, while financial institutions manage the risks incurred in their intermediary activities. For both, the trend to a more active management of risks, has promoted a greater use of derivative products in general.

Although a number of banks undertake *forward rate agreements* (FRAs) with non-bank clients, most transactions are between banks, often arranged through brokers. The market is international and the greater part of all transactions is in US dollars.

The number and value of London *currency and interest swap transactions* have grown dramatically in the past two decades. The motives for swap transactions[120] are varied, but, as both parties must profit for the transaction to be worthwhile, they all involve the principle of comparative advantage. This arises because different borrowers have different credit ratings in different markets and / or because

---

[119] Other (nonfinancial) derivative exchanges include LME (the London Metal Exchange), IPE (the International Petroleum Exchange) and LCE (the London Commodities Exchange). In November 1995 the Boards of LIFFE and LCE reached agreement to enter into detailed negotiations to merge the two exchanges. The transaction is expected to be finalised by the end of 1996.

[120] A swap transaction is an agreement to exchange specific financial commitments between two parties.

regulations have different impacts on different markets.[121] Financial institutions increasingly use swaps for purposes of asset and liability management.

[121] For a full discussion on the mechanism of swaps see Felgram (1988).

5.4 The German Financial System

The financial system of the Federal Republic of Germany[122] is predominantly orientated towards financial intermediation by banks as opposed to direct financial markets.

Vittas (1991: 17) explains the relative underdevelopment of German financial markets with reference to five factors. First, the close links between corporations and the universal banks, which provide financial and managerial support for expansion plans and restructuring operations may mitigate the need for the financial independence of the corporate sector. Second, the preference of most medium sized companies to operate as limited partnerships. Third, the imposition of turnover taxes. Fourth, the limited role played by pension funds in the German financial system as many company pension schemes are based on internal reserves that are reinvested in the sponsoring companies and are not available for investment in marketable securities. And, fifth, recurrent crises in the German financial system, have undermined the confidence of the savings public in marketable securities and have interrupted the evolution of the German financial system towards a more revised and balanced structure.

The weaknesses of German primary markets is therefore not entirely due to the dominance of banks in the economic system and financial markets. A number of other features of German law, tax policy, and regulation have also contributed to the relatively undeveloped nature of financial markets relative to German economic performance. German law, for instance, views options as 'gambling contracts', thereby limiting their enforceability. In addition, whole classes of potential issuers and holders of derivative securities (such as insurance companies and mutual funds) are prohibited from engaging in options and futures activity. Taxation policy also limits the attractiveness of high-value, high-turnover short-term financial assets. Germany levies a Stock Exchange Turnover Tax *(Börsenumsatzsteuer)* of between 0,1 per cent and 0,25 per cent of the market value of traded securities. Finally, the lack of

---

[122] In terms of the German Economic and Monetary Union Agreement, which took effect in July 1990, and The German Unification Treaty (implemented October 3, 1990) the Federal Republic of Germany (FRG) absorbed the former German Democratic Republic (East Germany or GDR), adding to its former state 108.000 square kilometers (43 per cent), 16,7 million people (27 per cent), and 353 billion Ostmark in GNP (approximately 10 per cent). The East German banking system was state-owned and bore little resemblance to Western commercial banking. It allocated income and credit on a centralised basis, in line with the command economy it served. Shortly before unification, the East German banking system had assets equivalent to DM 246 billion, representing a mere 7,5 per cent of the total assets of the Federal Republic's banking system at that time. It comprised the State bank (*Staatsbank*), which functioned as central bank, some commercial and cooperative banks, and 196 savings banks. Since unification, the former East German territories have become part of the Federal Republic of Germany. All responsibility for monetary policy has been transferred to the Deutsche Bundesbank, the former GDR banking system has become subject to the Banking Act of the Federal Republic, and its institutions subject to supervision by the Federal Banking Supervisory Office. For the purposes of this study, the former GDR area is regarded as fully integrated in the FRG banking system. In line with the approach adopted by the Deutsche Bundesbank, all former GDR figures are therefore aggregated in the FRG figures from the end of June 1990.

basic consumer protection, such as the absence of penalties against insider trading reduces public confidence in stock markets (Pozdena and Alexander 1991: 569).

Edwards and Fisher (1994) assess the view that certain distinctive features of the German system of investment finance (i.e. where the savings - investment process is organised around the banking system) make it more efficient relative to the UK system (which accords a greater role to the stock markets). The analysis casts some doubt on the argument that German banks are an important factor in good German economic performance.

5.4.1 Financial Institutions

Banks are the most important type of financial intermediary, dominating virtually all financial activity. Banks in Germany can be categorised by their legal form, size, structure and business strategy. However, there is little structural division of functions. Bank groups differ mostly regarding the emphasis they place on different aspects of their business.

The business of banking in Germany is defined in the Banking Act of 1961.[123] The Act defines a credit institution engaged in banking as any enterprise engaged in the following activities[124]:

- accepting deposits;
- making loans;
- discounting bills;
- providing securities brokerage services;
- providing trust (safe custody) services;
- operating investment funds;
- factoring;
- providing financial guarantees; and
- providing funds transfer (giro) facilities.

Banks in Germany can be divided into four main groups (Table 5.2): 336 commercial banks, which are overwhelmingly universal full-service institutions and hold some 24 per cent of total assets, 626 savings banks who hold nearly 40 per cent of total assets, 2.591 credit co-operatives with 15 per cent of all assets, and 89 specialised banks with 25 per cent of assets. All figures are stated as at November 1995.

The size of the German banking system is impressive both in relative national terms as well as by international comparison. With total assets amounting to DM 7 668 billion, the banking system transcends German GDP which in 1994 amounted to an already impressive DM 2 798 billion.

---

[123] Kreditwesengesetz, amended 1976 and 1985.

[124] These activities are discussed in greater detail in paragraph 8.2.2.

Table 5.2 The German Banking System - November 1995

Type of banks	Number of Institutions	Total assets (DM billion)	Percentage of total bank assets
Commercial banks			
Big banks	3	709	9,2
Regional and other banks	198	958	12,5
Branches of foreign banks	69	109	1,4
Private banks	66	54	0,7
Total commercial banks	336	1830	23,8
Savings banks sector			
Regional giros	13	1344	17,5
Savings banks	626	1486	19,4
Total savings banks	639	2830	36,9
Credit co-operative sector			
Regional credit corporations	4	256	3,3
Credit co-operative	2591	867	11,3
Total credit co-operative	2595	1123	14,6
Specialised banks sector			
Mortgage banks	36	952	12,4
Special functions	18	710	9,3
Building and loan	35	223	2,9
Total specialised banks	89	1885	24,6
Total banking system	3659	7668	100,0

Source: *Monthly Report of the Deutsche Bundesbank,* January 1996.

German financial markets were opened to limited foreign competition in the 1970s and the continuing deregulation of the financial markets is still mainly prompted by the process of integration with the European Community. Foreign banks have been unable to compete effectively with the 6 biggest German global banks with their strong capital resources and strong client relationships (Rosenzweig 1995). Thus German banks have been able to defend their domestic market successfully and they have also used the deregulation of the world financial markets to expand internationally.[125]

5.4.1.1 Commercial Banks

Amongst the *commercial banks*, the largest banking institutions in Germany are the three *large branch banks* - Deutsche Bank, Dresdner Bank and Commerzbank (known as *Großbanken*). These banks maintain a nationwide branch network of more than 3.500 branches and controlled 9,2 per cent of total domestic banking

[125] Deutsche Bank has been a leader in international expansion and has used the expansion opportunity to pick up skills, particularly in the acquisition of the UK merchant bank Morgan Grenfell and the Australian investment bank Bain & Co. Deutsche Bank also recently (1995) acquired an interest in the South African stockbroker Ivor Jones & Co. in a move prompted by the deregulation of the Johannesburg Stock Exchange.

measured by assets in November 1995. However, this figure is not a true indicator of the importance of these banks to the banking system. For example, the *Großbanken* handle 60 per cent of Germany's foreign trade payments, account for 50 per cent of all bonds underwritten by banks, and hold 40 per cent of all securities in safe custody. Moreover, they exert a great deal of influence on German industrial conglomerates due to their exercising of voting rights of shares deposited with them for safe-keeping, and their direct investments in private firms.[126]

The designation as *regional bank* is mainly historical, as no significant restrictions exist on the ability of a regional bank to branch elsewhere. Unlike the Großbanken, which are all stock corporations (AG),[127] regional banks are also organised as limited-share partnerships (KGaA)[128] or limited liability private companies (GmbH).[129] This is a very heterogeneous group; while most of these banks maintain a distinct regional orientation, several operate nationwide and internationally, such as Bayerische Vereinsbank, Bayerische Hypobank, Bank für Gemeinwirtschaft (BfG) and BHF. Banks which specialise in foreign business, such as European Asian Bank AG and Ibero-American Bank AG, are also considered regional banks.

The oldest group of German banks, namely private banks (*Privatbanken*), are organised as sole proprietorships, an arrangement no longer permitted in the establishment of new banks. Private banking was the original form of German banking, and the founding names of Oppenheim, Warburg, Berenberg, and Hauck remain associated with German private banking. These banks represent a mere 0,7 per cent of bank assets. However, their influence is greater than indicated by size, since private banks generally specialise in off-balance sheet activities or services which are only partially represented in balance sheets. Private banks differ considerably in their business activities, some of which include foreign trade financing, securities issuance and syndication, portfolio management, trustee service and corporate lending.

Traditionally, foreign banks have been represented in Germany by branches, but the recent trend is towards incorporation. There are 66 established branches in Germany. These branches are considered domestic credit institutions and are free of any restrictions on competition with other domestic banks in all areas of banking. Foreign banks tend to specialise as bankers to subsidiaries of foreign concerns as well as emphasising credit services associated with trade. Approximately 170 other foreign banks have representative offices (*Repräsentanzen*) in Germany.

5.4.1.2 Savings Banks

There were 639 savings banks (*Sparkassen*) in Germany at November 1995, with assets of DM 2.830 billion. Savings banks are, with few exceptions, owned by

---

[126] See paragraph 5.2.

[127] Aktiengesellschaft.

[128] Kommanditgesellschaft auf Aktien.

[129] Gesellschaft mit beschränkter Haftung.

regional governments or town councils[130] and operate within localised areas. Although they were originally intended only for the collection of savings from the public for the purpose of property lending, savings banks now operate as full commercial banks. *Sparkassen* are directed by management committees (*Vorstand*) operating under a board of administrators (*Aufsichtsrat* or *Verwaltungsrat*) comprised of local business and government officials.[131]

Twelve central savings institutes (*Landesbanken* or *Girozentralen*) serve as regional money centre banks for the *Sparkassen*. A thirteenth bank, Deutsche Girozentrale-Deutsche Kommunalbank, operates as the central wholesale institution for the national savings bank sector. As the depository of the *Sparkassen*'s liquidity reserves, central savings institutes play an important role in the German money market, and have been increasingly important in wholesale banking and international activities. Additionally, savings banks act as bankers for federal states, regions and their municipalities, and as mortgage banks through the refinancing of mortgages *via* bond issuance.

5.4.1.3 Co-operative Banks

Co-operative banks were formed in the previous century as part of a wider 'self-help' movement intended to collect savings and extend credit to members. They are called *Volksbanken* (people's banks) or Raiffeisen (after the movement's founder, Friedrich Raiffeisen). Today 2 595 local co-operatives, with about 18 000 branches and nine million shareholders, act as universal banks for their shareholders and other clients. These banks are served by three regional co-operative banks that act as money centres. Regional co-operative banks manage member banks' liquidity and provide services such as financing and managerial consultancy. These regional banks are in turn served by the central commercial bank of the co-operative sector, Deutsche Genossenschafts-bank Frankfurt (DG-Bank) which engages in all aspects of the banking business including international transactions.

5.4.1.4 Specialised Banks

Specialised banks accounted for 24,6 per cent of all banking activity in Germany (at November 1995). The most important of these institutions are the 31 private, and 5 public, mortgage banks (*Hypothekenbanken*). These banks concentrate on long term loans secured by mortgages on property and play a substantial role as lenders to the

---

[130] The German banking system is distinguished significantly from the British and other systems by the prominence of banks owned by the public sector. Privatisation of publicly owned banks is discussed periodically, primarily because of concerns over the public contributions to the capital needs of these banks. In most cases, however, the political pressure to maintain the traditional role and status of public banking frustrates privatisation efforts.

[131] This structure creates serious problems from a risk-management perspective. The most important task of *Aufsichtsrat* is to supervise the major activities of the *Vorstand*. This cannot be done effectively by government officials with little knowledge of or experience in banking and the management of banking risk. In the 1970s, some serious mismanagement could be observed in these institutions, leading to losses of several billion DM and leading to even severe political pressure on state governments. The ability of such institutions to receive support from the state prevents them from failing. This is clearly an anomaly which distorts competition.

public authorities. They obtain funds primarily through the floatation of mortgage and communal bonds in the public market.

The existence of specialised mortgage lenders in a country of universal banking is largely a consequence of financial regulation. Although universal banks may grant mortgage loans, the Mortgage Banking Act of 1963[132] does not allow them to issue bonds to finance these assets; section 5a of the Act restricts the issuance of mortgage bonds to mortgage banks. Universal banks desiring to participate in this activity do so by operating a mortgage banking subsidiary. As a result, most private mortgage banks are wholly owned by universal banks. Clearly, this situation does not lend itself to competitive neutrality.

There are 35 building and loan associations (*Bausparkassen*) in Germany who finance owner-occupied houses by collecting funds *via* various savings schemes, some of which enjoy government incentives and tax advantages.[133]

5.4.2 Financial Markets

Although there are various institutions engaged in German financial markets, the role played by banks in nearly all of these markets is so dominant that they can be characterised as interbank markets. Although non-bank intermediaries are not prohibited from participating, their role in the financial markets is relatively insignificant. In addition to the powerful role that banks fulfil in the financial system, the relatively underdeveloped nature of most financial markets is also a direct consequence of constraining financial regulations.

5.4.2.1 The Money Market

The money market is thus virtually an interbank market, used for the horizontal transfer of liquidity amongst the 200 actively trading deposit-taking institutions. The short-term paper market serves as an instrument of monetary policy, with nearly all trading done between the Bundesbank and the deposit-taking institutions. As a result the market in other short-term obligations is relatively underdeveloped.

The German Commercial Paper (CP) market, established in February 1991, is the youngest of the major CP markets. It has grown rapidly and since 1992, the amount of outstanding CP denominated in Deutschmark has surpassed that of the Sterling market. However, the investor base has remained narrowly domestic, due to a lack of credit ratings and the domination of CP arranging and dealing by the major German banks.

---

[132] Hypothekenbankengesetz, 1963, amended 1968, 1974, and 1988.

[133] Additional specialised banking institutions (not covered by the monthly balance sheet statistics of the Deutsche Bundesbank) include: installment credit institutions, Collective Securities Depositories (Kassenverein); Guarantee Banks; Investment Companies; Postal Giro and Postal savings; and Special Purpose Banks.

5.4.2.2 The Capital Market

In contrast, the capital market in Germany is large and fairly well developed, but plays a much less important role than its size indicates.

The **bond market**, although being the third largest in the world (after the United States and Japan), with outstanding issues of DM 2.870 billion at November 1995 and gross sales of DM 627 million in 1994, is also dominated by the banking system.[134] There are five main categories of bonds[135] traded in German markets.

The largest single component consists of the so-called *Sonstige Bankschuldverschreibungen*, made up of noncommunal and nonmortgage bank bonds that make up about 35 per cent of total bonds outstanding. These represent mainly the unsecured issue of debt by banks in the form of bearer bonds (*Inhaberschuldverschreibungen*). Historically, bearer bonds have had the advantage of not being subject to the high reserve requirements of non-bearer bonds.

The second largest component consists of the *direct debt placements of public authorities* (state and federal governments and agencies). These bonds represent about 28 per cent of all outstanding bonds.

Communal bonds (*Kommunalobligationen*) is the third category, representing about 16 per cent of outstanding bond debt. These bonds are issued by banks and backed by public sector guarantees.

The fourth category consists of the *bonds of special purpose banks*. Representing about 5 per cent of total bonds outstanding, these bonds consist of unsecured bearer bonds and communal bonds.

Fifth in importance are mortgage bonds (*Pfandbriefe*), representing about 4,9 per cent of outstanding bond debt. As discussed earlier, these bonds may not be issued by commercial banks, and are issued only by mortgage banks.

Finally, a very small component of the bond market is the *industrial bond market*. Strikingly, domestic borrowing by German corporations or companies in the bond market represents less than 0,1 per cent of all German bonds outstanding. This is an indication of the importance of bank loans (as opposed to direct floatations) in the raising of funds by German corporations.

While primary bond issues are large, most issues are held to maturity and infrequently traded. As a result, secondary market trading is narrow and illiquid. The market itself is also dominated by the banks, with new issues (including public debt)

---

[134] The largest commercial bank, Deutsche Bank, alone accounts for almost 50 per cent of bond trading activity.

[135] With the exception of direct placements of public authorities and industrial bonds, all remaining bonds are considered bank bonds. By this categorisation, nearly 71 per cent of all German bonds at November 1995 were bank bonds.

being bought through fixed syndicates of the major banks and in co-ordination with both the Bundesbank and the Central Capital Market Committee. The secondary market is predominantly over-the-counter in nature, with direct dealing far surpassing turnover on the exchanges.

Of almost equal importance to the bond market in Germany is the market in 'certificates of indebtedness' or *Schuldscheindarlehen*. Outstanding Schuldscheine are, in relative terms, about two fifths the size of the domestic bond market. Schuldscheine are negotiable, private placement, promissory notes. They are not securities, but can be traded by transfer or assignment of title. Schuldscheine are issued mainly by the public sector, banks and other credit intermediaries.

The existence and prominence of Schuldscheine are testimony to the burden of regulation and other underwriting costs on traditional bond issuance.[136] Because Schuldscheine are loans, rather than securities, they are exempt from registration and documentation requirements of listed securities. In addition, they do not need approval of the Ministry of Finance, as is required in the case of registered securities.

The **stock market** in Germany is much smaller than the bond market, with a year-end 1994 value of DM 190 billion at November 1994. Although in terms of market capitalisation it is the fifth largest equity market in the world (after the US, Japan, the UK and France) (The Economist 1995: 54), the market is relatively small given the size of the German economy with a GDP of DM 3 320 billion in 1994. In recent years the growth of the market has been slow, with German firms continuing to rely heavily on long-term, bank-financed loans. Stock trading remains regionalised, with seven regional exchanges in Frankfurt, Düsseldorf, Munich, Stuttgart, Berlin, Hanover and Bremen. Frankfurt and Düsseldorf are by far the largest of the exchanges, with about 75 per cent of total turnover, but overly strong regionalism continues to hamper the development of a centralised German equities market.

The relatively underdeveloped state of the German stock exchanges is illustrated by low participation (across all of the exchanges, only 550 companies are publicly traded), low turnover (currently only about 7 per cent of German GNP - DM 51 billion) as well as low public ownership and participation in the stock market (only 5 per cent of German households own equities).

5.4.2.3 The Foreign Exchange Market

By contrast, the foreign exchange market has always been important to Germany due to the large role of the foreign sector in the economy and the relatively early (1958) deregulation of capital flows and convertibility of the DM. By far the largest market in Germany is Frankfurt, following London, Tokyo and New York.

5.4.2.4 The Derivatives Market

---

[136] Pozdena and Alexander (1991: 569) estimate that the legal and documentary expenses associated with bond issuance in Germany result in unusually high underwriting fees of 2 per cent to 2,5 per cent. By comparison, Schuldscheine can be issued for about one quarter of these amounts.

Other financial markets in Germany have historically been relatively unimportant. Trading in options began in 1986 while the first financial futures and options exchange *(Deutsche Termin Börse* or DTB*)* only began its operations in January 1990. However, the DTB has shown steady growth and in the second half of 1995 the DTB became the world's fourth largest derivatives exchange (behind CBT, CME and LIFFE) with nearly 20 million contracts trading in the final quarter of 1995 (Bank of England 1996(a): 27).

5.5 The South African Financial System

Although small in absolute terms, the South African financial system has a largely deregulated, highly competitive and sophisticated banking industry in addition to generally well developed financial markets. A distinctive feature of the system is a low degree of international orientation. This is a consequence of external as well as internal financial regulations. South Africa's history of politically motivated isolation was accompanied by external financial sanctions. Internally, this necessitated the imposition of onerous exchange control regulations. The impact of these regulations on the financial system was evidenced by the low participation and representation of foreign banks in the domestic economy as well as the relatively low liquidity experienced in some financial markets. However, the lifting of sanctions and the re-acceptance of South Africa in the global economy has seen a substantial increase in the number of foreign banks represented or active in South Africa.

5.5.1 Financial Institutions

The South African exchange rate crisis of September 1975 focused attention on exchange rate policy and led directly to the appointment of the De Kock Commission on 16 August 1977. The De Kock Commission report (Republic of South Africa 1984: 42) outlines how the South African banking system since 1942 reflected the philosophy of state regulation and intervention. The report states that excessive regulation led to an unnatural level of non-bank intermediation (resulting from the inability of banks to compete on a level playing field with non-banks) which in turn resulted in ineffective methods for the supply of finance in the economy (Republic of South Africa 1984: 38). The De Kock Commission report represented a milestone in the deregulation of the South African financial markets in order to render them more market-orientated.

In South Africa all deposit-taking financial institutions are regulated by the Banks Act (Act 94 of 1990),[137] which extends to all areas of deposit-taking activities, unless such activities are specifically exempted from the provisions of the Act.[138] The Banks Act consolidated and revised the previous Banks Act (Act 24 of 1965) and the Building Societies Act (Act 82 of 1986).

Traditionally, banks were categorised according to their main areas of business. Under previous legislation, these institutions performed their intermediary activities as:

- Discount houses;
- Commercial banks;
- Merchant banks;
- General banks; and

[137] Previously known as the Deposit-taking Institutions Act in order to distinguish it from the preceding 1965 Banks Act.

[138] Such as the activities governed by the Mutual Building Societies Act (Act 24 of 1965).

- Building Societies.

The Financial Institutions Amendment Act (Act 106 of 1985), repealed the distinction between commercial banks, general banks and merchant banks. The Banks Act of 1990 dispensed with the remaining different types of banking institutions and even suspended the special dispensation previously accorded to discount houses. However, banking institutions remain free to designate themselves as commercial banks, merchant banks or other types of banking institutions conducting specialised banking business. The Banks Act consequently constitutes a new approach by accommodating all deposit-taking institutions under one Act.

At the end of 1995 the total assets of the South African banking institutions (Table 5.3) amounted to R 402 billion. The importance of this sector in the South African economy is evident when this figure is compared to the Gross Domestic Product which in 1995 amounted to R 484 billion.

Table 5.3 Combined Balance Sheet of South African Banks - December 1995

	December 1994 (R million)	December 1995 (R million)
Liabilities		
Non-bank deposits	239.719	295.420
Interbank funding	22.835	15.330
Foreign funding	18.917	25.213
Repurchase obligations	7.074	6.263
Other liabilities	20.788	23.604
Acceptances rediscounted	7.415	7.335
Capital and reserves	23.913	28.650
Total	340.661	401.815
Assets		
Loans and Advances	271 818	299 426
Trading portfolio	8 576	11 009
Interbank advances	12.364	12.487
Investments	17.593	20.932
Fixed assets	7.957	9.484
Acknowledgement of debt	7.415	7.335
Other assets	8.281	8.898
Monetary assets	6.657	10.496
Total	340.661	401.815

Source: *South African Reserve Bank: Bank Supervision Department Annual Report* 1995.

At year-end 1995 there were 41 (thereof 34 finally and 7 provisionally) registered banks in South Africa. Of these, four banks (Absa Bank, The Standard Bank of South Africa, First National Bank of Southern Africa and Nedcor Bank) dominate the banking landscape with R 310 billion or nearly 80 per cent of total bank assets. At the same time there were 47 foreign banks with approved representative offices in South Africa and four foreign banks with local branch offices.

Finally, as at 31 December 1995, three mutual banks registered in terms of the Mutual Building Banks Act (Act 124 of 1993), employed funds of R428 million, while one bank (African Bank Limited)[139] was under curatorship.

Metcalfe (1996: 3) estimates that around 60 foreign banks have a presence in the South African market. The growth in the activities of foreign banks indicates that new entrants are able to exploit opportunities in key niche markets. The 25 foreign banks surveyed plan to double in size within 5 years and believe that the market share of foreign banks will eventually plateau at around 10 per cent (Metcalfe 1996: 66). While the South African market is obviously considered attractive, there is already widespread concern about the level of competition across different lines of business and the narrowing of loan margins. The banks unanimously expressed disinterest in retail banking although several banks commented that one or more foreign banks might enter the retail market through acquisition (Metcalfe 1996: 67).

5.5.2 Financial Markets

In general, the trading of securities in South Africa is governed by the Financial Markets Control Act (Act 55 of 1989)[140] whilst the trading of equities falls under the Stock Exchanges Control Act (Act 1 of 1985).

5.5.2.1 The Money Market

The South African money market, which facilitates the borrowing and lending of funds for periods ranging from overnight to three years, is not a formalised market. Consequently, there is no separate exchange for trading in money market instruments and there is no legal restriction on entry to money market trading. In practice, only certain institutions namely banks and stockbrokers trade in the money market. From this it is evident that the money market can be described as an over-the-counter-market.

The interbank segment of the market exists for the placing of deposits, usually overnight, between banks. The market is active at the time of clearing, when banks with surplus funds place such funds with deficit banks. At the end of the clearing the net deficit (or surplus) of the entire banking system is reflected in the so-called 'money market shortage (or surplus)', i.e. the extent of Reserve Bank accommodation provided to the banking sector. A net deficit is always maintained for monetary control purposes.

The most important instruments of the South African money market are bankers' acceptances, trade bills, promissory notes, treasury bills, capital project bills and

---

[139] See paragraph 9.3.1.2 for a discussion of subsequent developments.

[140] The Financial Markets Control Act resulted from the conclusions and recommendations of both the 'Committee appointed to examine the market for public sector securities' under the chairmanship of Dr. A.S. Jacobs and the 'Committee of investigation into the development of financial futures transactions in South Africa' under the chairmanship of Dr. C.L. Stals. Both Committees recommended the establishment of uniform and formalised markets in bonds, futures and options, and that the principle of self-regulation should be applied to these instruments under the umbrella of an Act of Parliament.

negotiable certificates of deposit (NCDs).[141] Although formal provision for the issuance of commercial paper by certain companies has been made,[142] the regulations are generally regarded as being too onerous[143] and few of these instruments are currently being used (Pieterse 1994: 13).

5.5.2.2 The Capital Market

The capital market consists of the bond market and the equities market.

The Bond Market Exchange (BME) was formally established in 1993 by the Bond Market Association (BMA) under the provisions of the Financial Markets Control Act (Act 55 of 1989).

The main instruments used in the bond market are of a fixed-interest nature and include public sector securities, private sector securities and debentures. The maturity structures range from one to twenty six years.

The large issuers of these securities, which also operate their own secondary market operations, are the Reserve Bank (on behalf of the Treasury), Escom, Land Bank, South African Housing Trust, Development Bank of South Africa and Transnet. Smaller issuers generally use (merchant) banks as agents for their issues.

The exchange was licensed in May 1996 and took over the responsibility for trading in bonds from the present formal market operated at the JSE and the informal market outside the JSE. It is presently considering the introduction of exchange traded bond options.

The central government is the largest borrower, followed by the non-financial public enterprises. Financial institutions hold circa 75 per cent of marketable fixed securities. The largest holders within this group are the insurers, pension funds and the Public Investment Commissioners (PIC). The banking sector holds only 10 per cent of total marketable stock debt (South African Reserve Bank Quarterly Bulletin, various issues).

In South Africa the *equity market* is formalised under the Johannesburg Stock Exchange (JSE) licensed in terms of the Stock Exchange Control Act, (Act 1 of

---

[141] For a definition of these instruments see Faure (1992(a): 165-166).

[142] The issue of Commercial Paper is at present regulated in terms of Government Gazette 15309 dated 10 December 1993.

[143] Objections that have been raised include those regarding inconsistent disclosure requirements and arbitrary net asset requirements. On the one hand, a company desiring to issue CP must provide both its most recent financial statements as well as a statement on its capital, reserves and liabilities as certified by an auditor, resulting in a duplication of effort. On the other hand, these statements need only be provided at the date of issuance. With no ceiling placed on the maturity of CP, this 'flies in the face of the principles behind the Jacobs report, which calls for greater disclosure and the closing of loopholes' (Financial Mail 1993: 38). The regulations also require the issuing company to have a minimum net asset value of R 100 million. However, this gives no indication of the credit quality of the paper, as a company with an asset value below this level may well be creditworthy and one above the level not.

1985). The Act is administered by the Registrar of Stock Exchanges. The JSE has four markets, viz. the main board, the development capital market, the venture capital market and the traded options market[144].

The JSE is the tenth largest equity market in the world (The Economist 1995:54). Although large in terms of market capitalisation, the historical turnover statistics on the JSE are low as evidenced in Table 5.3. This is due *inter alia* to the existence of a 0,5 per cent marketable securities tax, uncertainty with regard to what constitutes a taxable profit in share transactions; concentration of ownership and the remaining foreign exchange control regulations on South African residents.

A JSE research subcommittee chaired by Prof. Michael Katz released a report on the restructuring of the JSE in May 1994. The following recommendations[145] contained in the report were subsequently accepted, in principle, by the members of the JSE:

- the introduction of negotiated commissions on transactions exceeding R 3 million;
- the revision of capital requirements for stockbrokers in line with international trends;
- the removal of South African citizenship as a qualification for membership;
- the establishment of limited liability corporate membership;
- corporate ownership of broking firms up to 30 per cent;
- retaining single-capacity trading;
- improving access to a listing on the JSE; and
- the provision of access to the equity markets by banks and other financial institutions as derivative members.

The proposed changes, may be likened to those implemented in the UK in the 1980s - the so-called Big Bang. However, unlike the UK, these recommendations were phased in over a two year period, although the eventual changes went further than the Katz Committee recommendations such as allowing 100 per cent corporate ownership of broking firms. At present the deregulated JSE allows for fully negotiable commissions, full foreign ownership of broking institutions and dual-capacity trading. In June 1996 the JSE moved the last remaining equity sector to screen based trading from the older 'open outcry' method.

These evolutionary regulatory changes, combined with the reduction in marketable securities tax from 1 per cent to 0,5 per cent in the 1996 Budget are likely to increase substantially the liquidity in the South African equity market.

---

[144] See paragraph 5.5.2.4.

[145] The committee differed on three core issues; single *versus* dual capacity trading; negotiable commissions; and corporate membership of the JSE. The majority opinion was opposed to dual trading capacity as it believed that this would remove the essential element of investor protection. The minority believed that dual trading should be permitted after a brief transitional period and that investors could be protected by a combination of automation, transparency and competition. The full subcommittee agreed on the linkage between dual capacity and fully negotiable commissions but the majority feared that it would result in higher dealing costs for the small investor. The minority group favoured fully negotiable commissions. The minority group was also in favour of a swifter transition to unrestricted corporate ownership of stockbroking firms than the initial 30 per cent limit favoured by the majority.

Table 5.4 Liquidity in The Johannesburg Stock Exchange

	Turnover (R millions)	Market Capitalisation (R millions)	Liquidity
1988	11.247	291.660	3,9
1989	20.720	414.042	5,0
1990	23.912	386.510	6,2
1991	22.231	508.270	4,4
1992	22.134	501.324	4,4
1993	44.080	737.632	6.0
1994	71.712	919.802	7,8
1995	63.194	1 022.656	6,2

Source: *The Johannesburg Stock Exchange*

Of great relevance to this study is the fact that banks are now allowed to participate in securities business activities via fully owned broking firms.[146]

5.5.2.3 The Foreign Exchange Market

The development and present structure of the foreign exchange market was largely influenced by the South African dual exchange rate system[147] and the existence of strict exchange control regulations.[148] Nevertheless, South Africa has an active and developed spot market in all of the major currencies.

The ultimate provider of forward cover in the foreign exchange market in South Africa is the South African Reserve Bank. Since the abolition of the financial rand in March 1995 the South African Reserve Bank has reduced its involvement in the forward currency market; a move facilitated by greater South African access to international foreign exchange markets. Presently the Reserve Bank quotes commercial rand forwards against the US dollar up to a maximum of 12 months on a swap basis at a price determined by the interest rate differential between the two countries. Most

[146] See paragraph 9.2.2.

[147] Except for the brief period between February 1983 and September 1985, South Africa has maintained a dual exchange rate system since the Sharpeville political incident in 1960 when large outflows of capital occurred. The dual exchange rate system comprised the commercial rand (used for commercial trade and loan transactions) and the financial rand (reserved for certain transactions conducted by non-residents, immigrants and emigrants such as investments or disinvestments excluding loan capital). The financial rand traded at a discount to the commercial rand and the effect of this dual exchange rate system was to improve substantially the rate of return to foreign investors. In March 1995, the financial rand was abolished and all transactions involving foreign currency are now concluded through the commercial rand.

[148] The statutory basis of South African exchange control is section 9(1) of the Currency and Exchanges Act (Act 9 of 1933), which empowers the Head of State (or such person as he chooses to delegate his powers to) to 'make regulations in regard to any matter directly or indirectly related to or affecting or having any bearing upon currency, banking and exchanges.' Based on this Act the government, on 1 December 1961, issued Government Notices No. R1111 and No. R1112, which still forms the basis of South African exchange control. Over the years the control measures have become increasingly complex. Although exchange control is still seen as a matter of practical necessity to prevent the large-scale outflow of captive funds of residents, there are doubts about the effectiveness of these controls.

South African banks are increasing their participation in all areas of the liquid forward market.

The net daily turnover in the South African foreign exchange market, excluding transactions in futures and options, averaged $ 4,9 billion in 1995. The annual turnover of the South African foreign exchange market is about fifteen times the combined annual value of South African imports and exports. Compared to global annual foreign exchange transactions which are estimated to be forty times the total value of annual imports and exports (Faure 1992(a): 192), this is a modest amount. The limited role of speculation, limited access to international foreign exchange markets and restrictive foreign exchange control legislation has prevented significant growth in turnover.

Despite these restraints the South African foreign exchange market has grown from a net daily turnover of $ 2,9 billion in 1991 to $ 4,9 billion in 1995. This growth record is accounted for by increased invisible trade, very large capital movements since 1987 and a larger degree of foreign exchange speculation.

The future development of the forward exchange market is largely dependent on the increased participation of foreign banks in the market, the development of a formal Eurorand market, and most importantly less onerous exchange control restrictions on South African residents.

5.5.2.4 The Derivatives Market

The South African derivative markets that are discussed below are the futures market and the options market. The markets for interest rate swaps and forward rate agreements (FRAs) are as yet small and underdeveloped.

The South African *futures market*[149] is formalised under the South African Futures Exchange (SAFEX) which was licensed by the Registrar of Financial Markets on 10 August 1990 in terms of the Financial Markets Control Act (Act 55 of 1989). SAFEX was the first market to be licensed in terms of the Act and was authorised to regulate the trade in futures and options on futures.

SAFEX has approximately 80 members comprising of banks, stockbrokers, futures brokers and certain other institutions.

[149] The financial futures market in South Africa was initiated by Rand Merchant Bank Ltd. in 1988 when it began trading futures contracts based on the JSE Actuaries All Share, All Gold and Industrial Indices. Initially Rand Merchant Bank acted as the only market maker and clearer and guarantor of all futures trades, in effect performing the function of a formalised clearing house for futures. In September 1988, the JSE and 21 banks became the founding members of the South African Futures Exchange (SAFEX) and shareholders in the company established to clear futures, i.e. SAFEX Clearing Company (Pty) Ltd. (SAFCOM). All futures trades were transferred from Rand Merchant Bank to this company on 27 April 1989.

The turnover in futures contracts is shown in Table 5.5. Since 1992, the value of futures trading has considerably exceeded the turnover on the JSE, indicating once again the low liquidity of the latter.

Table 5.5 Futures Volumes in South Africa

	Number of contracts	Underlying Value (R millions)
1990	511.420	16.291
1991	604.640	23.291
1992	1.363.029	49.075
1993	3.029.289	103.616
1994	4.087.483	203.125
1995	3.550.588	194.310

Source: *South African Reserve Bank: Quarterly Bulletin, 1996.*

Turnover in futures contracts fell back slightly in 1995 mainly due to a more stable environment in the foreign exchange market, a decline in non-resident participation and the negative effect of the Barings Bank debacle on derivatives trading globally.

The South African *options market* has both a formalised (i.e. an exchange) as well as an over-the-counter (OTC) dimension. Although the options market in bonds is a OTC market, the market centres around certain standardised options (predominantly the Escom 168 loan stock). In addition, there are the semi-standardised options which include the so-called daylight, overnight and tailor-made options. In 1992, the Johannesburg Stock Exchange launched its Traded Options Market (TOM) for the trading of options on certain listed shares[150] and share indices[151]. However, the volume of formalised trading in options has been disappointingly low mainly because of a lack of market-makers and exorbitant costs involved.

[150] Listed companies on whose shares options are offered on TOM include: Anglo American Corporation of South Africa Ltd., Barlow Rand Ltd, De Beers Consolidated Mines Ltd., Rustenburg Platinum Holdings Ltd., Sasol Ltd., and Vaal Reefs Exploration and Mining Company Ltd..

[151] Index options are traded on the JSE All Share (overall), All Gold and Industrial indices.

5.6 Excursus: The Eurocurrency Market

> *The full importance of an epoch-making idea is often not perceived in the generation in which it is made...The mechanical inventions of every age are apt to be underrated relatively to those of earlier times. For a new discovery is seldom fully effective for practical purposes till many minor improvements and subsidiary discoveries have gathered themselves around it.*
> Alfred Marshall (1842-1942)

Any description of national financial systems is incomplete without reference to the international dimension. Indeed, the increasing internationalisation of financial markets have raised important new regulatory issues. As domestic financial markets have become more integrated in global markets, activities important to the domestic economy have passed beyond the control of domestic regulatory authorities. This problem is complicated, as attempts to tighten domestic regulations strengthen incentives for activities to move abroad. The development of the Eurocurrency markets is the most prominent example of this process (Levich 1990: 373-399).

The Eurocurrency (originally Eurodollar) market originated when in the late 1950s, UK merchant banks were restricted by the regulations of the Bank of England on the use of Sterling for external loans. Necessity is the mother of invention, the old proverb states and the innovative solution[152] of these banks was to use the US dollar to conduct these transactions from accounts based in London. Since Bank of England regulations did not cover the US dollar, UK merchant banks could set competitive interest rates to attract deposits and offer external loans denominated in dollars.[153]

The Eurocurrency market was founded, above all, on the fact that international banks were able to offer holders of international currencies higher returns if they placed these funds offshore, in a centre like London, than if they deposited them in the domestic financial system, which is subject to monetary regulation.[154] The margin was originally created mainly as a result of the absence of reserve requirements on banks accepting deposits in the form of Eurodollars. In addition, the costs of subscribing to the US federal deposit insurance scheme increased the margin. In the American case, therefore, the effect of domestic regulation has been to spur the development of offshore deposit markets (Van Niekerk 1987: 42).

---

[152] Perhaps the regulatory authorities realised the genius of this innovation and the impending snowball effect that it might have. When Paul Einzig, a *Financial Times* journalist, first discovered the market, he was requested not to write about it.

[153] Curiously, the growth of the Eurocurrency market was (unintentionally) aided by Russia. Intending to protect hard-earned export dollars from possible nationalisation by the United States, Russian officials deposited such funds in London and Paris affiliates of state-owned Russian banks. The Paris Bank, Banque Commerciale pour l'Europe du Nord, had the Telex address EUROBANK, which later became synonymous with the general activity of accepting deposits offshore.

[154] The Euromarkets do not operate independently of domestic financial markets. Domestic monetary policy will influence the Euromarkets, especially in the absence of restrictions on capital flows. Shaw (1984: 154) argues that interest rates on the Euromarkets are determined by domestic rates, i.e. the causality of changes in interest rates is from domestic markets to the Euromarkets.

Another important, though temporary, stimulus to the Eurocurrency market was the imposition of credit restrictions and capital controls imposed by the US during the period 1963 - 1974.[155] European governments also experimented with capital controls during this period which similarly promoted the non-dollar segments of the Eurocurrency market. One example is the regulations of the Bundesbank requiring foreigners to place funds at the 'Bardepot' in non-interest bearing accounts, which was only abolished in 1974.[156]

The lasting stimulus to the Eurocurrency market, then, has been the differential regulations between domestic and offshore banking operations. The majority of these regulations were direct monetary requirements. The introduction of these controls has lead to a process of monetary disintermediation in favour of offshore markets, on a dimension never before experienced by regulatory authorities.

The rise of the Euromarkets is relevant to this study, as it accentuates that market participants and financial institutions have the alternative to arrange transactions in any of several financial centres. Therefore, regulatory authorities must be keenly aware of the costs imposed by domestic financial regulations and the implications for the co-ordination of international financial regulation.

Indeed, as Kane (1987) has argued, domestic financial regulations are determined competitively and endogenously after taking into account the regulations, both present and prospective, in other financial systems and areas. The essence of Kane's (1987) analysis is that the market for suppliers of financial regulation is highly competitive. As such, the deregulation of financial markets and financial institutions is ascribed to national regulators who compete for market share. The 'market' for financial regulation is competitive in the sense that other regulatory authorities may offer (or potentially offer) more favourable regulations relative to the domestic regulator. This actual or potential competition serves to constrain the actions of suppliers of financial regulation.[157]

This point is particularly relevant in the South African context. In an increasingly global environment, both South African market participants and regulatory authorities will need to adapt to new and global competitive challenges. This is likely to lead to a greater degree of convergence of financial regulation across financial systems. In

---

[155] In response to the undesired accumulation of dollars overseas (dollars that the US was commited to convert into gold at $35 per ounce) the United States adopted the Interest Equalisation Tax (IET), effectively an excise tax on US purchases of foreign securities. Instead of earning tax revenues or halting dollar lending to foreigners, the borrowing activity was simply displaced by the Eurocurrency markets in London and Luxembourg. Other US regulations such as the Foreign Credit Restraint Program ('voluntary' in 1965 and mandatory in 1968) provided firms with further incentives to conduct business in the Eurocurrency markets. These measures were eliminated in 1974.

[156] For an analysis of the impact of German capital controls on the differential between onshore and offshore interest rates see Dooley and Isard (1980).

[157] A German experience offers some indication of the sensitivities of both investors and regulatory authorities. In 1988, about DM 120 billion flowed out of the Federal Republic of Germany, partly because investors wanted to avoid the 10 per cent witholding tax on interest income that became effective on 1 January 1989. On 27 April 1989 the German government announced that the witholding tax would be abolished on 1 July 1989.

particular, regulatory convergence will drive further relaxation of exchange control regulations which are out of step with international trends.

The nub of the argument, however, is not new. It is a logical implication of the theme described at the outset, namely the constancy of structural change in financial systems and the importance of constantly evaluating financial regulation in the light thereof.

5.7 Summary and Conclusion

In conclusion, it can be said that all three systems surveyed, sport well-developed financial markets, as for instance demonstrated by the existence and growth of derivative markets in each of these. In Germany, banks have historically dominated the financial industry which inhibited development of a broader financial market, yet the existing financial markets allow German banks the opportunity to actively manage their financial risks.

It is interesting to note the large disparities between the market share of the large banks in each economy. In Germany, the three big banks (who are often criticised for their excessive power) hold only 9,2 per cent of the market whereas the four largest South African banks have a market share of over 80 per cent. Nevertheless, all three systems display a high degree of competition as exemplified by the number of market participants; and innovation as indicated by the level of development of the financial markets.

Viewed from a South African perspective, there are compelling reasons for selecting the financial systems of Germany and the UK in order to perform a comparative analysis of financial regulation. The three systems are currently experiencing largely similar structural forces (such as deregulation, competition, globalisation, technological changes and innovation). Whereas Germany and the UK exhibit some dissimilar, indeed opposite, financial features (such as regards models of corporate governance and models of banking), South Africa can be regarded as a hybrid system, sharing features of both.

Banks in the UK can be divided into commercial banks, foreign banks and other deposit-taking institutions. Building societies are regulated in terms of separate legislation. At August 1996 there were 720 such institutions holding total banking assets of £ 1 963 billion.

The City of London provides the basis for some of the largest and most sophisticated financial markets in the world. The consistent deregulation of financial markets both preceding and antedating the 'Big Bang' has aided the development of the marketplace and resulted in a greater integration of domestic and international markets.

The dominant position of German banks has resulted in the German financial system being orientated more towards financial intermediation than towards direct financial markets. The German banking system consists of commercial banks, state-owned savings banks, credit co-operatives and specialised banks. Although all of these banks fall under the supervisory ambit of one banking act, there are still some financial regulations which are not in accordance with the principles of competitive neutrality, most notably in the case of mortgage banks. In November 1995 the total amount of bank assets held by 3 659 of these institutions amounted to DM 7 668 billion.

Compared to Germany's economic performance, its financial markets are relatively underdeveloped. This is mainly due to regulatory constraints as well as the significant role played by banks in these markets.

In South Africa, no distinction is drawn between various categories of deposit-taking institutions as these are all considered banks. At the end of 1995 the total assets held by the 41 registered banks amounted to R 401 billion. South African financial markets are generally well developed and largely deregulated, the most notable exceptions being those markets that are affected by exchange control regulations.

The Eurocurrency market developed as a result of the differential regulations between domestic and offshore banking operations. Because the 'market' for financial regulation is competitive, domestic regulators must also consider the actions of other regulatory authorities.

CHAPTER 6

A COMPARISON OF REGULATORY AUTHORITIES IN SELECTED FINANCIAL SYSTEMS

6.1 Introduction

This Chapter provides a comparison of regulatory authorities in the UK, Germany and South Africa. In each case the relevant banking supervisory authority is described with reference to the historical development thereof, the supervisory approach adopted, the supervisory methodology embraced and finally, the relationship between the banking supervisory authority and other supervisory bodies.

This historical development of each supervisory authority is useful as it provides an insight as to the manner in which supervisors reacted to changing economic and financial circumstances and underlines the concept of regulation being a dynamic process.

Supervision entails much more than the application of rules, even if these are considered complex. It is for this reason that the supervisory approach and methodology are discussed. The supervisory approach relates to the manner in which regulations are applied. This may range from a strict enforcement of very specific risk-related rules to the application of more general risk-related principles. The supervisory approach also encompasses the degree of formality adopted by regulatory authorities, (i.e. formal vs informal approach).

The supervisory methodology distinguishes between 'on-site' and 'off-site' supervision, which indicates whether supervisory authorities are themselves involved in the collection of risk-related data (or rely on banks and / or auditors to do so) as well as the degree of interaction by regulators with bank management. Finally, banking supervision cannot be seen in isolation from the remainder of the financial system and it is therefore necessary to understand how the banking supervisory authorities fit in with the overall supervisory structure.[158]

---

[158] Goodhart (1995: 333-359) considers the institutional separation between supervisory and monetary agencies. A major argument for divorcing the monetary from the bank regulatory authority is that the combination of functions might lead to a conflict of interest. This conflict is argued to bring about a bias towards additional money creation insofar as the central bank, in its role of lender of last resort, will extend emergency assistance facilities to a troubled bank. This is an unconvincing argument as the central bank will know the precise amount of assistance and will be able to adjust monetary policy measures accordingly. There are, however, stronger grounds for claiming that those concerned with financial stability may seek to restrain interest rate increases needed from a macro-economic perspective, although this will depend on the particular structure of the financial and banking system in each country. The main historical basis for arguing in favour of such a combination was the central bank's objective of preventing contagious crises. Until the development of alternative efficient and safe payment systems has occurred, the central bank is likely to retain its important role both in organising and supporting the payment system. This implies both an assumption of credit risk, and /or a need to deal with emergency liquidity risks. This is the strongest ground supporting the continuing combination of such functions.Goodhart (1995: 359) argues that central banks are tending to retreat from the

6.2 Regulatory Authorities in the United Kingdom

6.2.1 Historical Development

In order to understand the current UK supervisory system, it is useful to examine the forces that have shaped its development. Until 1979, there was relatively little statutory provision for banking supervision and monetary regulation in the UK. The Bank of England (the Bank) maintained a rather informal supervisory system based on 'moral suasion', derived from its status as central bank. The system was notable for its considerable reliance upon self-regulation by the institutions concerned. There were few formal regulations or prescribed codes. The system emphasised periodic interviews between bank management and the Bank. Although the Bank monitored certain prudential ratios, no minimum ratio levels were prescribed. The cash, liquidity and reserve assets ratios imposed by the Bank were laid down for reasons of monetary policy. Until 1974, supervision was carried out by the Discount Office of the Bank, whose main function was to influence short-term interest rates. One consequence of this approach was that no generally accepted definition of a bank existed. This system, unique to the UK, worked well for a considerable period. However, the increasing risks in banking and financial systems throughout the world resulted in the adoption of a more formal regulatory structure.

The specific impetus was provided by the secondary or *fringe banking crisis* of 1973-1975. Secondary or fringe banks were newer banks which had grown up alongside the established primary banks.[159] In the first significant academic survey of the Discount Office's approach to supervision, Revell (1975) suggests that the major cause of the fringe banking crisis was not the Bank of England supervisory system itself, but the loophole in that supervision resulted from Section 123 status. Some Section 123 banks did not have to make returns to any official body, although they were required to publish half-yearly accounts. Section 123 banks were effectively free to accept deposits and make loans. When the property and stock markets plunged in 1974, the value of the assets held by secondary banks dropped so much that their capital was wiped out. The Bank, together with the big clearing banks, responded to the crisis with the Lifeboat rescue operation. In total, 26 banks and financial concerns were assisted through the Lifeboat group and at least the same number received forms of support from their own banks or major shareholders. In the

---

previous primary role as provider of emergency assistance for two related reasons. First the banking system is becoming less clearly defined; consequently it is more difficult to persuade the members of the banking club to agree to co-operate in financial rescues. Second, the central bank is less able to organise co-operation on a self-regulatory basis, thereby increasing the need for the government to provide ultimate financial support. This means that the regulatory / supervisory function is shifting away from central bank control to an independent body which is more directly under political control. Notwithstanding this structural trend, the continuing role of the central bank as the only available source of immediate last resort liquidity means that, even if formally separated, the two bodies who have to work closely together in practice. Consequently, even though a formal separation of supervisory and monetary functions may become more common, this change may not impact significantly on practical realities.

[159] It is, however, significant that a number of banks that were fully recognised by the Bank of England also engaged in the riskier banking practices of the fringe banks.

well-known cases of Slater Walker and Edward Bates, extensive and costly support was provided by the Bank. The approximate total sum set aside by the Bank for its rescue role was £ 100 million, while the total amount lent through the joint Lifeboat operation exceeded £ 1.300 million (Reid 1986: 101). Most of this was repaid in due course, usually by strong groups who took over the insolvent banks, often facilitated by the Bank.

The obvious inference from this crisis was that it had been a mistake not to have monitored and supervised such a significant sector of banking activity. The Bank responded with new measures in August 1974. This marked the emergence of the modern bank supervisory function in the UK. A new Banking and Money Market Supervision section (BAMMS) was established by the Bank. Presided over by a more senior official than had headed the Discount Office, this action also considerably extended the previous supervisory responsibilities. The new system of supervision was immediately extended to cover more than 60 'non-bank' deposit-taking institutions and 100 banks outside the clearers and other big groups. These were required to submit regular quarterly returns and to provide greater detail on the main components of their business (Gardener 1986: 74; Reid 1986: 103-104).

Although the administration and status of banking supervision changed, the underlying supervisory philosophy was left intact. The most important part of the supervisory process remained the regular interviews with bank management to discuss and elaborate on the reports.

The *1979 Banking Act* was a landmark in that it was the first time that the regulatory powers of the Bank were formalised in specific legislation. The key elements of the Act reflect the lessons of the secondary banking crisis. An important aim of the Act was to prevent any bank or other financial institution from accepting deposits without the prior authorisation of the Bank. The Act defined the institutions which were subject to legislation and specified the criteria which had to be satisfied to obtain authorisation. The Act required banks to be either authorised as banks or licensed as deposit-taking institutions. Although the Act was silent on supervisory controls like minimum balance sheet ratios, the Bank was given statutory powers to monitor that banks continued to satisfy the conditions for authorisation. The Bank's supervisory style of dialogue and flexibility, and its special relationship with supervised banks, were not altered by the Act (Gardener 1986: 77-78).

The failure of Johnson Matthey Bankers (JMB), which necessitated it to be rescued by the Bank in 1984, was the catalyst for the reform of the 1979 Act. This reform culminated in the new *Banking Act of 1987*. To fully appreciate the nature of this reform, it is necessary to review the shortcomings in banking supervision exposed by the JMB affair. Hall (1989: 17-19) distinguishes three headings: auditors, authorisation procedures, and large exposures.

Under the Companies Act, *auditors* were required to report to shareholders on whether or not financial statements reflected a 'true and fair view' of a bank's financial position. If auditors failed to form such an opinion they could either resign or qualify their opinion, both options which could lead to a run on the bank. Unlike the

case in other countries, auditors could not turn to supervisory authorities as this would have represented a breach of confidentiality. In the light of the above and the subsequent litigation[160] that arose out of the JMB case it seemed desirable to allow for a regular dialogue between auditors and supervisors. Moreover, as the JMB collapse went undetected by the auditors, it was clear that more detailed reporting requirements would have to be imposed.

Second, the merits of the two-tier *authorisation process*, whereby authorised banks were supervised less extensively than licensed deposit-taking institutions, were called into question by the JMB affair. The management of JMB, an authorised bank, evidenced gross material incompetence in nearly every facet of commercial banking.

Finally, JMB's failure to report certain *large exposures* and its persistent understatement of the size of its two largest exposures, indicated the need to move towards the statutory reporting of large exposures and to make misreporting, or failure to report, an offence.

As a consequence of the JMB affair, the Chancellor of the Exchequer, in 1984, established a committee to review banking procedures. The Review Committee, under the chairmanship of the Governor of the Bank reported in June 1985 (the Leigh-Pemberton Report). Following the publication of three consultative papers on issues raised in the Report and after extensive consultation with the principal banking and accountancy associations, the government issued a White Paper on Banking Supervision in December 1985. The proposals contained in the White Paper formed the basis of the 1987 Banking Act. The major statutory amendments introduced under the Act relate to an extended role for auditors,[161] new authorisation procedures,[162] new treatment of large exposures,[163] new criminal sanctions, new Bank of England powers and the formal establishment of the Board of Banking Supervision (Hall 1989: 23-25).

Certain changes were made to the UK Banking Act with effect from 1 January 1993 to accommodate European Community law (most notably that associated with the implementation of the 'single market' programme in financial services). In the light of the BCCI affair, Lord Justice Bingham made a number of recommendations for the reform of domestic supervisory practice, which were accepted in full by both the government and the Bank. The Bingham Report recommendations can be found in HMSO (1992). The Post-BCCI Directive ('Directive of Reinforce Prudential Supervision within the European Union following the Collapse of BCCI') was implemented in 1996. The Directive covers not only European credit institutions but also investment firms and insurance companies. It has four main provisions: first, it gives supervisors powers to refuse authorisation where group and ownership links prevent effective supervision; second, it requires financial undertakings to have their

---

[160] Both the Bank of England and JMB sued Arthur Young, the auditors of JMB, for alleged negligence while Arthur Young, in turn, sued the Bank of England and the Chancellor of the Exchequer for defamation.

[161] See paragraph 7.2.3.2.

[162] See paragraph 7.2.1.

[163] See paragraph 7.2.5.1.

head office in the same Member State as their registered office; third, it allows a widening of the range of disclosure gateways allowing supervisors to provide information to, among other, those supervising the accountancy profession and bodies responsible for the detection and investigation of branches of company law (including external inspectors); and fourth, Member States must place a duty on auditors, and experts (such as reporting accountants) appointed by supervisors, to report material breaches of relevant laws and certain other concerns to the supervisory authorities. In the UK, auditors have had a statutory duty to report relevant information to supervisors since May 1994[164] (Bank of England 1996(c): 30).

British banking supervision will also be influenced by changes due to the failure of Barings Bank in 1995. The Bank recently conducted a nine month review of banking supervision. Although the review had its origins in the Board of Banking Supervisions Report into the Barings collapse, it was more wide-ranging and investigated the standards and processes of supervision. The review confirmed that the Bank should maintain its style of supervision characterised by discretion, pragmatism and the avoidance of bureaucracy. Nevertheless, certain improvements were recommended and the following actions will be taken (The Banker 1996: 13):

- reorganising the supervisory staff into smaller divisions to reduce the pressure on senior management;
- raising the experience level of supervisory staff, especially in complex areas;
- developing a more systematic model of risk assessment which will drive the supervisory programme in respect of each individual bank which will determine the supervisory priorities for the period ahead. This will involve the supervisors spending more time 'on-site', but is not a move to 'examinations';[165]
- reviewing the use made of input from internal and external auditors. The current Reporting Accountant (Section 39) regime, which focuses on internal controls, will be improved;[166] and
- continuing to forge more effective, practical and better documented links with other supervisors.

Another initiative in the broader area of supervision and regulation concerns the establishment of the Personal Investment Authority (PIA) during 1994. The PIA was established to regulate retail financial services covering those areas previously covered by FIMBRA and LAUTRO.[167]

---

[164] See paragraph 7.2.3.2.
[165] See paragraph 6.2.3 below.
[166] See paragraph 7.2.3.2 below.
[167] See Diagram 6.1.

6.2.2 Supervisory Approach

Despite the existence of a statutory framework, the Bank continues to rely heavily on its informal authority.[168] The objective of supervision explicit in the 1987 Act is the protection of the interests of depositors and the wider concern with the soundness and stability of the overall banking system. The Bank prides itself on the flexibility of its supervisory approach and the degree of consultation which takes place before supervisory initiatives are implemented.

The Bank's approach to supervision is such, that it does not see itself as a regulator. As Brian Quinn (1993: 260), who had been an Executive Director at the Bank (until 1 March 1996) argues:

> *'Regulation, as the word indicates, is about rules and about the precise formulation and policing of those rules. In respect of financial services it calls for the codification of a corpus of strictly defined and detailed rules relating to particular activities, products and services. It entails specialised techniques of monitoring and enforcement and is usually accompanied by sanctions which are equally precise in their nature and in the circumstances of their application...Supervision is different, both in content and in style: the law sets the framework within which authorised companies may operate, rather than prescribing in detail how the relevant goods and services should be provided.'*

Hall (1989: 49) argues that the informal approach of the Bank 'serves to further the cause of the economy and the banking system as a whole by limiting the competitive distortions introduced and the damage done to the innovative capacity of the industry.'

However, Metcalfe (1986: 139) expresses some doubts about the robustness of the system. One basic problem is the lack of a general definition of a bank. The supervisory system covers banks and other deposit-taking institutions, but the distinction between these is not clearly explained. Banks are identified according to their size rather than on conceptual grounds.

A practical implication of this lack of conceptual clarity, is the UK regulatory distinction between banks and building societies. The latter are regulated by the 1986 Building Societies Act, which came into effect in January 1987. The Act provides for the creation of a Building Societies Commission responsible for supervising the societies (Swary and Topf 1992: 153). This legal distinction between financial institutions which perform essentially similar functions, i.e. deposit-taking,

---

[168] However, as Hall (1989: 180) comments in a footnote, this approach could change 'if the number of institutions willing to accept it were to diminish in the face of an intensification of competition from overseas institutions unused to such a supervisory relationship and more concerned with the letter of law and rulebooks. Already, such a shift towards a legalistic frame of mind is evident in the indigenous City institutions heralding, perhaps, a new dawn for statutory purposes.'

forms the basis for a number of regulations[169] which are not compatible with principles of competitive neutrality.

A second potential source of problems is that supervisors base their decisions on the quality of bank management, rather than on prescribed financial ratios. However, it is difficult to define the quality of management operationally. Clearly, the track record of the individuals concerned will play an important role. Although the Bank does not claim to be able to make better commercial judgements than commercial bankers, they are claiming a more sophisticated and abstract competence, namely the ability to judge the managerial skills of commercial bankers (Metcalfe 1986: 139). To some extent Gardener (1986: 44) counters this notion when he argues:

> *'The very existence of supervision is almost taken to be an insult to bank management competence. This view reflects a fundamental misconception as to the role of supervisors...The supervisory authorities cannot (and would not generally wish to) run banks, because that is simply not their job. After all, with complete internal authority and full access to the relevant information, management itself is faced with a full-time task. Even with these characteristics and data, control over all bank variables by management is never complete and always difficult. An outside body, like supervisory authorities, would be faced with a much more difficult task than management if it attempted to control each bank completely. Indeed, it would be an impossible task.'*

Nevertheless, the basic point remains relevant. It is a much easier supervisory task to monitor a bank's compliance with a number of prudential requirements, than it is to judge the quality of bank management.

Finally, Metcalfe (1986: 139) feels that supervisors may lack the analytical tools to model the banking system as a network of organisations even though the danger of a domino effect in interbank relations is often discussed. The openness of British banking due to the pre-eminence of London in international finance, increases the vulnerability of the system to world events. In effect, increased reliance is placed on international arrangements to cope with disruptive changes.

---

[169] For instance, the Building Societies Act only allows building societies to purchase up to 40 per cent of their funds in the wholesale deposit markets. Whilst the Act extended the traditional role of building societies (providing loans secured by a first mortgage of residential property) by allowing unsecured loans up to 10 per cent of a building society's commercial assets (total assets, less fixed assets), this is not comparable to the much broader diversification possibilities open to banks. However, one may argue that this requirement is rather one relating to liquidity risk-management as it seeks to prevent building societies from lending excessively on the short end of the market. A government review on the regulation of building societies was published in July 1994, focusing on possible changes to the regulations concerning wholesale funding and asset holdings (Naisbitt 1995: 46).

6.2.3 Supervisory Methodology

As is evident from the above, the Bank does not favour the inspection-based methodology to supervision. Instead, it relies upon frequent management interviews as the core of its supervisory approach. Discussions are based on the data from prudential returns, profitability forecasts and auditor's reports. The latter covers the bank's accounting procedures, record-keeping, internal control systems, reports that may have been made at the initiative of the accountants or reports that may have been made at the request of the Bank. Where deficiencies are identified, advice is given to the bank's management as to the manner and time-span of remedial action. Close monitoring then ensures compliance with the Bank's requests. (Hall 1989: 51-52; Hall 1993: 32).

The Bank's routine meetings are of two main types: the prudential interview to discuss the institution's performance and other supervisory issues; and the trilateral meeting attended by the Bank, the institution and its reporting accountants.[170]

Following the failure of BCCI and Barings, the Bank has committed itself to *extending its on-site examinations* of banks (The Banker 1996: 13).

6.2.4 Relationship with other Regulatory Bodies

The Financial Services Act of 1986 is intended to ensure the safety and protection of the investor. The Act represents the first comprehensive attempt in the UK to cover investment business. Under the provisions of the Act it is a criminal offence to engage in investment business without appropriate prior authorisation.

Authorisation can be obtained either directly from the Securities and Investments Board (SIB), to which the Secretary of State has delegated his supervisory powers; or from the appropriate Self Regulatory Organisations (SROs), which are responsible for the day-to-day supervision in various financial services. The full regulatory structure is depicted in Diagram 6.1.

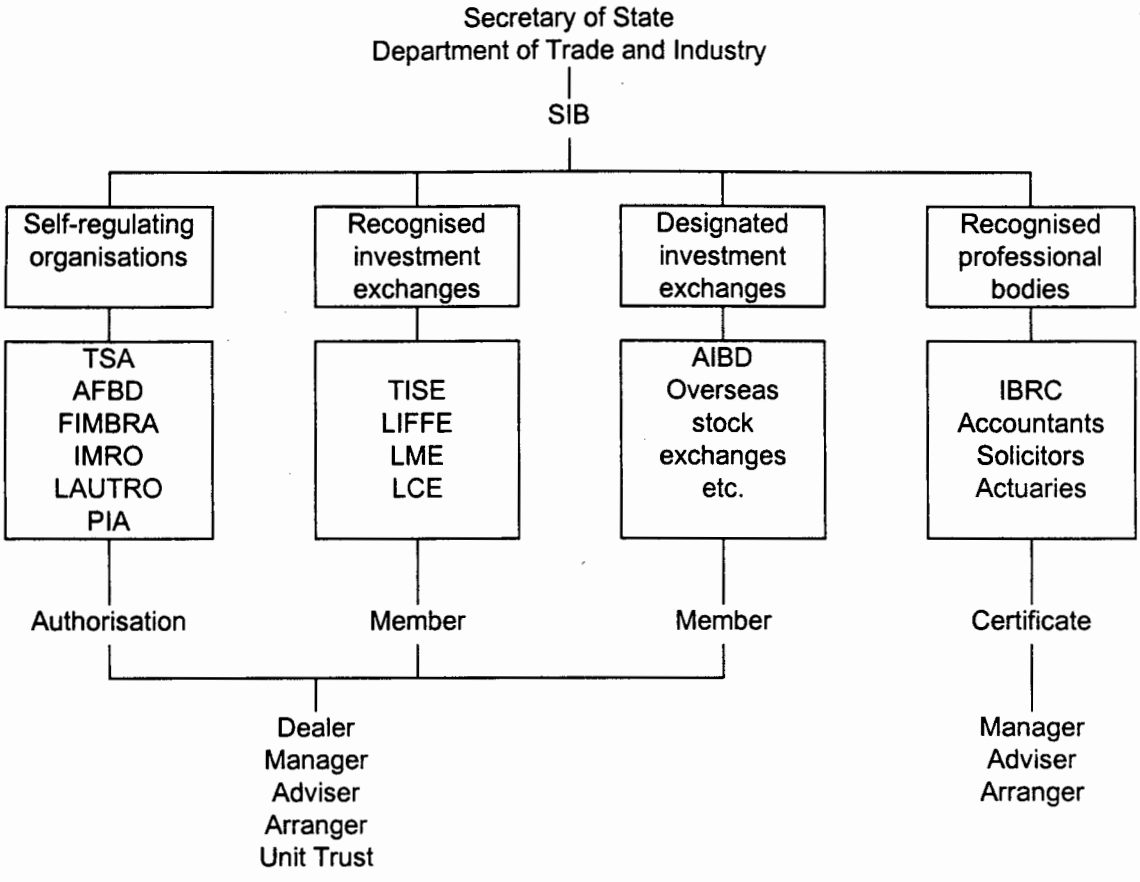
The SIB is also empowered to recognise investment exchanges, clearing houses and professional bodies, to draw up conduct of business rules, to establish compensation schemes[171], and to discipline firms and individuals where necessary.

---

[170] At which the discussion is focused on reports produced by the reporting accountants under section 39 of the Banking Act. (See paragraph 7.2.3.1). In 1995-96 there were 652 routine prudential interviews with the UK authorised institutions and 347 trilateral meetings. In addition over 2 500 non-routine meetings were held to discuss specific issues (Bank of England 1996(c)).

[171] Under the scheme introduced on 27 August 1988 for the entire financial services industry, investors who suffer losses as a result of fraud and mismanagement by investment businesses operating with full authorisation will be entitled to compensation of up to £ 48.000 being 100 percent on the first £ 30.000 plus a maximum of 90 per cent on the following £ 20.000. The amount of compensation may be reduced by the SIB if claims exceed the amount of £ 100 million.

Diagram 6.1 Structure of UK Regulatory Authorities



Abbreviations

AFBD	Association of Futures Brokers and Dealers
AIBD	Association of International Bond Dealers
FIMBRA	Financial Intermediaries, Managers and Brokers Regulatory Association
IBRC	Insurance Brokers Registration Council
IMRO	Investment Management Regulatory Organisation
LAUTRO	Life Assurance and Unit Trust Regulatory Organisation
LCE	London Commodities Exchange
LIFFE	London International Financial Futures Exchange
LME	London Metal Exchange
PIA	Personal Investment Authority
RIE	Recognised investment exchange
RPB	Recognised professional body
SIB	The Securities and Investments Board
SRO	Self-regulating organisation
TSA	The Securities Association
TISE	The International Stock Exchange

Source: Hall (1989); Naisbitt (1995)

The deposit-taking function of banks is exempted[172] from the Financial Services Act 1986, because this function is regulated by the Bank under the Banking Act 1987. Banks nevertheless fall within the ambit of the Financial Services Act by virtue of the investment business in which they engage and are obliged to acquire separate authorisation for each category of investment business, and to abide by the relevant conduct of business rules.[173] The Act therefore espouses a *functional* approach to regulation (Llewellynn 1992: 250).

In order to reduce an overlapping of supervision between the Bank, the SIB and the SRO's, the Act provides for a *lead-regulator* approach, whereby the supervisory body responsible for the majority of the operations of an investment business is required to co-ordinate the supervision.

The formal division of supervisory responsibility is carried out according to the March 1988 *Memoranda of Understanding* (MoU) between the Bank, on the one hand, and the SIB, TSA and IMRO (see Diagram 6.1). Under this agreement, the Bank has assumed the role of lead-regulator for all UK-incorporated banks engaged in investment business, with the financial services supervisor being required to monitor institutions' compliance with conduct of business rules. As lead regulator, the Bank will monitor the capital adequacy on behalf of the SIB/SRO according to an agreed set of risk-related rules[174] (Hall 1989: 37-38; 53-54).

Historically in the UK, the institutional approach has been dominant, largely because institutions have tended to be specialist in nature. The lead-regulator approach of the Financial Services Act represents an attempt at combining the functional approach and institutional approach to regulation. Nevertheless, Llewellyn (Melamet Report 1993: 6) argues that the UK has moved too far towards functional regulation and that this has caused difficulties. Llewellyn (Melamet Report 1993: 6) makes the point that: 'however efficient functional regulation is, the user of financial services is put in jeopardy if the institution with which he deals is unsafe.'

Hall (1993: 44) also argues that the cost-effectiveness of supervision might be improved if the Bank relied less heavily on the 'lead regulator' principle in discharging its supervisory responsibilities, but admits that this may involve a fundamental re-assessment of the merits of functional vis-à-vis institutional regulation.

---

[172] Unlike building societies and insurance companies, however, banks are obliged to contribute to the SIB's compensation scheme. This is clearly not in accordance with the principle of competitive neutrality.

[173] Banks are required, for instance, to adopt the 'polarisation rules' relating to the sale of life assurance, unit trust and pension products. Under these rules, a bank has to operate either as an independent intermediary (not selling its own products), or as a (tied agent) company representative. The rationale for these rules is to avoid conflicts of interest, but they may also stifle competition. Most banks are innovatively evading these rules by selling their own products from branch networks while the sales force operate as tied agents.

[174] For example, for bank members of TSA, the Bank will determine capital adequacy by taking into account both the risk-asset ratio on normal banking business and the TSA's counterparty risk requirements for securities trading, using the Bank's standard definition of capital.

Another criticism levelled at the structure of regulatory authorities in the UK is the fact that several regulatory authorities exist, creating dangers of complexity, inconsistency, overlap, duplication and high administrative costs. Llewellyn (1992: 252-253) quotes Lord Clinton-Davis' summary of the problem in a House of Commons report:

> *'The House of Commons Trade and Industry has raised important criticism of our system of regulation - part statutory, part self-regulatory - which has become so extremely complex and fragmented that its effectiveness must be flawed...The complexity of our machinery for investigation is utterly remarkable. We have no fewer than eleven different authorities responsible for investigatory or regulatory work. Often, several of these may be involved at any one time. Important questions about the efficiency of such a system must be: is there sufficient competition between these authorities; and is there a likelihood of commercial malpractice slipping through the net as a result of this web of different authorities? In each case the answer must be yes.'*

The structure of UK regulatory authorities is clearly too complex. Under the 1986 Financial Services Act banks, building societies and insurance companies may be subject to the same regulatory requirements as regards the conduct of similar business activities and the protection of consumers. However, depending upon which service is involved, these requirements are administered by either the SIB, the PIA, or the IMRO. Moreover, for prudential purposes, banks are subject to the requirements of the Bank, building societies to the Building Societies Commission and insurance companies are subject to the jurisdiction of the Department of Trade and Industry (Llewellyn 1995: 212).

This is a good example of combining functional regulation for consumer protection with institutional regulation in the interest of systemic stability. Nevertheless, these objectives are confused by the multiplicity of regulatory authorities involved.

6.3 Regulatory Authorities in Germany

Despite its size and diversity, the post-war German financial system has historically been reasonably free of bank failures. There are many likely explanations for this, including the relatively consistent and robust growth of the German economy, the geographical diversification enjoyed by German lenders, and the close relations between bankers and their commercial customers. In addition, German banking policy was designed to mobilise market disciplinary forces as well as the advantages of a firmly administered supervisory system.

6.3.1 Historical Development

The basic legislation enabling the present supervisory system was established in 1934 in response to the worldwide economic crisis in the 1930s and the consequences of the German banking crisis of the time. Until this time the banks operated freely in an unregulated market. The 1931 Banking Act (*Reichskreditwesengesetz* or RKWG) provided for the establishment of a Bank Supervision Department (*Aufsichtsamt für das Kreditwesen*). Although an important motivation that led to the passing of the RKWG was to nationalise banks according to the then dominant national socialistic philosophy, it was rather decided that (RKWG 1934: § 6):

> *'die private Initiative mit eigener Verantwortung die zweckmäßigste Grundlage einer Organisation der Kreditinstitute darstelle, wenn zugleich durch eine entsprechende Gestaltung der Aufsicht dem Gesamtinteresse rücksichtslose Geltung verschafft werde.'* [175]

Although charged with supervisory responsibility, it was up to a separate body (the *Reichskommissar für das Bankwesen*) to oversee that banking business was conducted in accordance with the specific regulations of the RKWG[176] and the Bank Supervisory Department. With a few exceptions, all banking institutions were subjected to regulation and supervision by these authorities. The focal point of the RKWG was the Golden Banking Rule *(Goldene Bankregel)* which determined that the term structure of liabilities should approximate the term structure of bank assets.

In 1939 the *Aufsichtsamt für das Kreditwesen* was renamed to *Reichsaufsichtsamt für das Kreditwesen*. In 1945, after the War, the authority of the latter was transferred

---

[175] 'the most efficient way to organise banking business is to combine the responsibility of private initiative with a structure of banking supervision that will guard the common interest without scruples' (writer's own translation).

[176] Examples of specific regulations contained in the 1934 RKWG include: §1: Supervision of (all) banks; definition of banking business; §§ 2 ff.: Duty to be licensed as a bank and the right to forbid the undertaking of banking business; §§ 8,9: Regulations concerning notification regarding a change in management; the merger of banks; and large credit exposures; §§ 11 ff.: Regulations regarding liquidity, capital and the relation of capital to liabilities; §§ 14 ff.: Loans to associated companies (Organkredite); §§ 20 ff.: Regulations concerning balance sheets, savings business and non-cash payments; §§ 30 ff.: Organisation of supervision; §§ 45 ff.: Enforcement powers and punitive charges.

to the Minister of Economic Affairs (*Reichswirtschaftsminister*) where it remained until 1961.

Despite the political and economic changes brought about by the end of the Second World War, the RKWG retained its basic validity. The years 1955-1956 saw the preparation of a new Banking Act. The central question posed was whether supervision should be exercised centrally, rather than federally, while the actual content of the Act received far less attention.

The 1961 Banking Act (*Kreditwesengesetz* or KWG) is still at the heart of the present supervisory system. In terms of the Act the Federal Banking Supervisory Office (*Bundesaufsichtsamt für das Kreditwesen* or FBSO) was established in Berlin. The main supervisory objective as contained in the motivation[177] for the KWG was:

> *'Die Funktionsfähigkeit des Kreditapparates zu wahren und die Gläubiger nach Möglichkeit vor Verlusten zu schützen.'*[178]

The KWG draws upon the 1934 RKWG for a number of definitions as is evident from the following regulations: § 1: Definition of a bank; § 10: Capital adequacy; § 11: Liquidity; § 13: Large credit exposures; § 15: Credit exposures to related companies (*Organkredite*); §§ 21 ff.: Savings business; §§ 25 ff.: Balance sheet regulations.

It is remarkable that many of the regulations contained in the 1934 RKWG already addressed banking risks and could therefore be maintained in the banking legislation which is used to this day in Germany.

In the early 1970s a number of small to medium banks experienced financial difficulties. However, the 1976 Amendment was specifically brought about by the failure of the large Bankhaus Herstatt.[179] In 1974 a special committee was established to investigate the German banking system and to make relevant recommendations. The committee found the banking system, in general, to be effective, but made certain recommendations regarding the risk positions of banks which were legislated in 1976 (Brümmerhof 1988: 360).

The Second Amendment (1985) to the Banking Act deemed it necessary to make provision for banking supervision beyond the purely domestic domain. As the popular financial daily, the Frankfurter Allgemeine Zeitung commented, banking supervision should *'mit ihren Kanonen nicht nur bis Aachen schießen können, sondern auch bis Luxembourg'* [180] (Habscheid 1988: 17). Again, the most urgent motivation for the Amendment was the financial difficulties experienced by a well-known bank (Schroeder, Münchmeyer, Hengst & Co.) in 1983.

---

[177] *Regierungsbegründung des Entwurfs eines Gesetzes über das Kreditwesen vom 25.5.1959.*

[178] 'safeguarding the functionality of the banking system and, where possible, (protecting) the investor from (incurring) losses' (writer's own translation).

[179] See paragraph 3.4.1 for a discussion of the circumstances and the reaction of the Bundesbank.

[180] 'The cannons (of banking supervision) should be able to bombard not only to Aachen, but also to Luxembourg' (own translation).

The Third Amendment to the Banking Act, which also came into force in 1985, introduced a consolidation procedure for banking supervision purposes in addition to the existing supervision of individual banks. Until that time, banks could build up credit pyramids through their subsidiaries without any increase in the parent institution's capital base and thus bypass the restrictions on business that are based on the bank's capital (Deutsche Bundesbank 1993: 6-7).

In terms of the Fourth Amendment to the Bank Act, which came into force on 1 January, 1993, two directives of the European Community (EC), viz. the Second EC Banking Directive and the Own Funds Directive, were transplanted into German law. These Directives constitute a substantial step towards harmonising banking supervision legislation in the EC and are the precondition for free transactions in financial services in the single European market. In accordance with these regulations the licensing and ongoing supervision of banks were harmonised throughout the EC. The branches in other EC member states of a bank domiciled in a specific EC country were, in principle, subjected to the sole supervision of the home country authority responsible for that domicile, and a uniform, extended definition of capital was agreed upon (Deutsche Bundesbank 1993: 7). The 1993 Amendment also aimed to differentiate between various risk categories and to weigh these accordingly (Müller 1993: 798).

The most recent amendment to the Bank Act took effect on 31 December 1995. In terms of the Fifth Amendment to the Bank Act the European Guidelines regarding large exposures[181] and consolidation guidelines[182] were translated into German law.

In terms of this amendment the following changes were decided upon by the financial committee of the German parliament: The term 'credit' will only be used with reference to large exposures (*Großkredite*) and loans exceeding the sum of one million German marks (*Millionenkredite*); derivative instruments are to be included in the monthly returns to the Bundesbank for such loans; 'silent' equity participations are viewed more generously when determining capital adequacy; as are unrealised reserves pertaining to special funds. Other improvements to the Act were made with regards to market making operations, credit assessment, loans to associated companies as well as certain other loans (Handelsblatt 1994: 37).

Thus the fulcrum of the present supervisory system remains the Banking Act of 1961 (as amended in 1976, 1985, 1993 and 1995). It defines the organisations that constitute 'banks' and lays out the principles for setting bank ratios and standards.

The basis for banking supervision is summarised as follows in the preface to the Act (Deutsche Bundesbank 1993: 5):

> *'The legal basis for bank supervision in Germany is the Banking Act. This Act is aimed at safeguarding the viability of the banking industry, which is particularly sensitive to fluctuations in confidence, by protecting creditors. The*

[181] See paragraph 8.2.5.1.

[182] See paragraph 8.2.4.2.

Act seeks to fulfil this aim while paying due regard to market principles, i.e. the entire responsibility for business decisions rests with the bank managers. The activity of banks is restricted only by quantitative general provisions and the obligation to disclose their books to the supervisory authorities; the supervisory authorities do not intervene directly in the banks' individual operations.'

The authorities responsible for banking supervision in Germany are the FBSO together with the German Central Bank (Deutsche Bundesbank). There is a clear division of functions between the FBSO and the Bundesbank in the area of banking supervision:

- sovereign functions, e.g. the issuing of administrative guidelines and regulations, are the responsibility of the FBSO;
- before issuing general regulations, the FBSO must confer with the Bundesbank. The degree to which the Bundesbank is entitled to participate is graded according to the extent to which regulations affect its functions;
- the Bundesbank is fully involved in the day-to-day supervision of banks and analyses their annual and other reports. Observations which the Bundesbank makes in the course of its own activities are also used in the monitoring operations (Deutsche Bundesbank 1993: 5-6).

6.3.1.1 The Federal Banking Supervisory Office

The function of the FBSO is to supervise banks in accordance with the Banking Act. Based in Berlin, the FBSO is an independent Federal Authority entrusted with maintaining the safety and integrity of all banking institutions. It is required to take action against abuses of the banking system which tend to endanger the safety of assets entrusted to the banks, impair the orderly performance of banking transactions, or entail substantial disadvantages for the banking system as a whole (Banking Act 1961: § 6). The President of the FBSO is appointed by the Federal President acting on a proposal from the Federal Government which consults the Bundesbank on the matter (Banking Act 1961: § 5). The FBSO falls within the jurisdiction of the Ministry of Finance, although it has considerable autonomy in practice. The FBSO must obtain the agreement and co-operation of the Bundesbank for all its policies.

The most important regulatory powers of the FBSO include (Brümmerhof 1988: 363-371; Swary and Topf 1992: 66):

- the issuance and withdrawal of banking licenses;
- the promulgation of regulations concerning capital adequacy, liquidity and lending limits;
- the determination of standards for auditing and the internal organisation of banks;
- the right to request reports and information of any type and to conduct investigation as it sees fit;
- the approval of the selection of bank management; and

- the intervention in the affairs of a bank when deemed necessary, ranging from the limitation of certain activities to the forced liquidation of a bank.

An interesting aspect of having a regulatory authority that does not form a direct part of the central bank, concerns the costs of operation. In so far as the costs of the FBSO are not covered by license fees and other charges, 90 per cent is paid for by the banking industry and the remainder by the Federal Government.

6.3.1.2 The Deutsche Bundesbank

The present Bundesbank was formally established in terms of the Bundesbank Act of 1957. Although it enjoys authority and independence unparalleled with other central banks, it does not carry responsibility for the prudential supervision of banks. Nevertheless, due both to its other central bank functions such as being (monetary policy, banker to the government and banker to banks) and its mandated role of co-operation with the FBSO, the Bundesbank plays an important *de facto* role in the supervisory system.

The role of the Bundesbank in monetary policy has a regulatory impact through the setting of key interest rates such as the Lombard and the Discount rates, and the setting of minimum reserve requirements. As provider of liquidity to the banking system, the Bundesbank has made it clear that it will not automatically guarantee the solvency of a failing bank (Swary and Topf 1992: 66).[183]

The basis for co-operation between the FBSO and the Bundesbank is set out in § 7 of the Banking Act. It entails exchanging opinions and making recommendations that may be useful to each other. In practice, most bank reports are submitted first to the Bundesbank, and are then passed to the FBSO with its comments. Although the Bundesbank assists in the evaluation of these supervisory reports, the implementation of sanctions is left to the FBSO.

6.3.2 Supervisory Approach

The regulatory approach to banking supervision in Germany is in sharp contrast to that of the UK. In particular, the historical development of German banking legislation has lent itself to a more formal and legalistic approach to supervision. Although the efforts to harmonise banking legislation within the European Community has seen the adoption of regulatory standards which are more explicitly related to risk-management, German regulators tend to focus on detailed compliance requirements rather than overall risk exposure. Moreover, the German supervisory authorities require a very large degree of detail in the supervisory returns rendered by the banks. Finally, German banking regulations are characterised by a very extensive set of detailed rules.

---

[183] For legal opinion regarding the responsibility of the state in the case of insufficient (*fehlsame*) banking supervision, see Habscheid (1988).

Consequently, the supervisory approach in Germany is not based explicitly on the financial risk-management of banks, even though the legal requirements and financial returns do relate to banking risks as will be indicated in Chapter 8.

However, the extensive rule-based German regulatory framework has tended to be interpreted very narrowly, resulting in the exploitation of loopholes and the circumvention of the spirit of the rules (Swary and Topf 1992: 65). As Müller (1993: 798) argues, the most spectacular bank failures in the post World War II German banking history have not been prevented by the existing regulations and supervisory procedures - but were rather caused by the intentional circumvention of these by bank management.

6.3.3 Supervisory Methodology

To enable the banking supervisory authorities to conduct a regular analysis of banking business, banks are required to submit monthly returns to the Bundesbank. The Bundesbank passes on these returns, together with its comments, to the FBSO. When the Bundesbank collects monthly balance sheet statistics for the purpose of its monetary analysis, these are at the same time considered to be monthly supervisory returns in order to avoid duplication of work for the banks. The holding company of a banking group must submit both its own monthly return and a pro rata consolidated monthly return for the group.

The process of banking supervision is heavily dependent on the correctness of banks' data. For this reason the annual auditors' reports must meet particularly high standards. The FBSO and the Bundesbank have no such auditors of their own; instead, the banks are audited by independent certified auditors whom they select by themselves and who, in their audits, have to comply with the detailed auditing guidelines laid down by the FBSO. Section 29 of the Banking Act (1961) spells out the duties of the auditors. Savings banks and banks in the co-operative bank sectors are normally audited by the auditing bodies of their respective associations.

Moreover, the FBSO is empowered to carry out its own audits without having to provide a special reason for them (Banking Act 1961: § 44 (1)). External certified auditors are also entrusted with these audits, though not with audits of foreign exchange transactions, which are carried out solely by the Bundesbank.

Further information is provided by the audit reports of the deposit guarantee funds. These reports must likewise be submitted to the supervisory authorities immediately (Banking Act 1961: § 26 (2)). The FBSO appoints special auditors for audits of safe custody accounts (Banking Act 1961: § 30).

The FBSO may call and attend meetings of a bank's supervisory board and order or prohibit certain actions (Banking Act 1961: § 45, 46). However, the general supervisory methodology is **off-site** and visits by supervisory authorities are much less frequent than in the UK. Great reliance is therefore placed on the supervisory returns.

6.3.4 Relationship with other Regulatory Bodies

Apart from the close relationship between the FBSO and the Bundesbank that is documented above, little evidence could be found of regulatory co-operation between these institutions and other regulatory bodies in Germany. Indeed, the only other major regulatory organ is the *Bundesaufsichtsamt für das Versicherungswesen* (Federal Insurance Supervisory Office), also located in Berlin and responsible for the regulation of all insurance business.[184]

Consequently, all banking business as well as near-banking business are regulated by the FBSO and Bundesbank, which are in a conceptual sense a single regulatory authority. This state of affairs is facilitated by the universal nature of German banks and the encompassing role of banks in the German financial system. While the definition of banking business may already be considered broad[185], the Federal Minister of Finance can also, after having consulted the Deutsche Bundesbank, designate other business as banking business by regulation (Banking Act 1961: § 1).

The Banking Act provides that the FBSO may enlist the services of other persons and institutions to assist in the performance of its functions (Banking Act 1961: § 8). However, in many cases,[186] the FBSO will be the responsible supervisory authority, even if this does not fall within the conceptual ambit of bank supervision (Scharrenberg 1994: 90).

Baums and Gruson (1993: 123-124) argue that some of the more obvious advantages of the German universal banking system and concurrent supervisory structure are the following:

- in Germany there are no regulators with overlapping jurisdictions. The powers of the FBSO and the Bundesbank are clearly defined; and
- there are substantially fewer laws and regulations in Germany in comparison to the US, consequently there is no need to engage in cumbersome procedures for granting exemptions from regulations.

The points made by Baums and Gruson (1993) apply with equal force to the financial systems of the UK and South Africa, where the overall regulatory structure is obfuscated by the existence of multiple regulatory authorities.[187]

---

[184] Although banks may not conduct insurance business, banks may act as brokers for the sale of insurance policies issued by licensed insurance companies. Banks may also own insurance companies (Baums and Gruson 1993: 123). For a discussion on insurance regulation in Germany, see Rabe (1990).

[185] See paragraph 8.2.2 below.

[186] See for instance Scharrenberg (1994: 90-96) on the supervision of German equity and bond markets.

[187] This issue will be further advanced in Chapter 10.

6.4 Regulatory Authorities in South Africa

6.4.1 Historical Development

Banking in South Africa commenced in 1793 when the Lombard Bank (also known as Bank van Leening) opened its doors. This was followed by the establishment, in 1808 of the Lombard Discount Bank. These banks were founded by the Dutch Commissioners and it was not until 1836 that permission was granted for the first private bank, the Cape of Good Hope Bank, to be formed. By 1861 there were 29 local banks (Price Waterhouse 1995: 12).

The first piece of banking legislation in South Africa was the Joint Stock Bank Statements Act of 1865, which required all banks and bank branches to publish a half-yearly statement in a prescribed format.

In 1942, banking legislation provided for stricter regulations pertaining to commercial banks, particularly with regard to liquid asset and reserve requirements. Although this legislation was motivated by the ability of commercial banks to create money, it was emphasised that these provisions were not intended primarily as instruments of discretionary monetary policy (Republic of South Africa 1984: 40).

Due to the changing nature of banking in South Africa, a Technical Committee on Bank and Building Society Legislation was appointed in 1960. The Committee concerned itself with three questions (Republic of South Africa 1984: 41):

- could the existing bank and building society legislation still be regarded as adequate for effective monetary and credit control?
- was the effect of the legislation still uniform and aimed at bringing about effectiveness and stable growth?
- did the legislation still ensure liquidity, solvency and the security of the different types of banking institutions?

The regulatory measures that were subsequently contained in the 1965 Banks Act included the following:

- banks had to comply with liquid-asset requirements based on their liabilities to the public;
- banks had to provide regulators with a quarterly statement of assets and liabilities; and
- limits were placed on the following:
    - positions that could be taken in the currency markets;
    - certain investments in property and shares;
    - the discretionary refunding of fixed deposits; and
    - the structure of assets and liabilities.

In 1984 the Final Report of the Commission of Inquiry into the Monetary System and Monetary Policy in South Africa (De Kock Commission Report) was released. The De Kock Commission acknowledged the importance of a stable banking system to the

monetary authorities; and was of the opinion that bank supervision and capital adequacy requirements of banks had a direct, albeit limited, effect on monetary policy and monetary control measures (Republic of South Africa 1984: par. 6.52).

An important aspect of monetary policy with regard to financial regulation was the view expressed by the Commission that control over the money supply should be exercised through control over liquid-asset requirements, which included cash reserves[188] rather than through regulations attempting to control the deposit-taking or lending activities directly. The Commission was of the opinion that direct and semi-direct control measures had negatively affected the competitive position of banks as financial intermediaries and had resulted in disintermediation; as well as distortions on the balance sheets of banks (Republic of South Africa 1984: par. 6.23; 6.24, 6.30; 17.50).

Other interesting, non-monetary aspects of the De Kock Commission Report regarding financial regulation is that the Commission expressed itself as being strongly in favour of the risk-based approach to capital adequacy (Republic of South Africa 1984: par. 6.60); and that regulation in the banking sector should be applied functionally, rather than institutionally.

The Commission also considered the involvement of the central bank with the bank supervision function. It found that the international tendency was for central banks to become more involved with bank supervision in general, since liquidity and other financial problems of specific banks tended to become the responsibility of the central bank as lender of last resort. Consequently, the central bank would prefer to be informed, on an on-going basis, of the financial stability of those institutions that might seek assistance.

In 1987 the banking supervisory function was transferred from the Department of Finance to the South African Reserve Bank. Apart from the shortage of qualified staff in the Department of Finance; which was later expressly identified by the Van der Horst Committee,[189] the principal reason for this step was the South African debt crisis of 1985. The large short term foreign obligations of South African banks in the face of an excessively depreciated national currency was of grave concern to the banking supervisory authorities. Consequently it was decided to conduct the supervision of the then fragile banking system under the guardianship of the central bank in order to combat expeditiously any crisis that could occur.[190]

This step was accompanied by a fundamental reassessment of the nature and relevance of bank supervision in a changing economic environment.[191] The problem that was addressed was the implementation of a structured, risk-based approach to

---

[188] The latter instrument was eventually recommended, although the Commission agreed in principle to control over liquid-asset requirements.

[189] See paragraph 6.4.4.1.

[190] Interview with Dr. C. J. de Swardt, (who was at the time Registrar of Banks and is presently Deputy President, South African Reserve Bank) on 6 June 1994.

[191] This was also the topic of a Masters thesis by Van Greuning (1991).

bank supervision. It is useful to follow this reassessment by reviewing the returns required under the 1965 Banks Act with the subsequent supervisory procedures.

The 1965 Banks Act required the completion of the following prudential returns:

- liquidity and cash-reserve requirements;
- capital adequacy requirement;
- detailed balance sheet;
- foreign currency open position; and
- foreign assets and liabilities.

This piece of legislation did, to a limited extent reflect the regulation of risks by banks. Nevertheless, Van Greuning (1993: 43) concludes that the only risks that were addressed with a reasonable measure of success by the returns required in terms of the 1965 Banks Act were those in respect of currency risk, risk in respect of off-balance sheet items and credit risk. Information on other financial risks such as liquidity risk, interest rate risk, and market risk were not adequately discernible in these returns.

Similarly, South African banks expressed criticism with regard to the detailed emphasis on certain aspects of their business. Banks were of the opinion that the forms required the provision of too much information, resulting in unnecessary costs. Criticism was also expressed regarding the fact that the regulations under the Act were continually amended by means of circulars. Most importantly, since not all risks were measured in the statutory returns, the information required was not related to the needs of management (Van Greuning 1993: 43-44).

At the same time, regulatory authorities regarded supervision as a legal-administrative process. The administration of the 1965 Banks Act, in addition to the editing of the statutory returns, occupied most of the supervisors' time. Although individual supervisors did perform analyses and evaluations, little attention was given to a consistent, structured approach that would encourage in-depth analyses of trends and relationships in the banking sector. Moreover, there was little scope for follow-up work in respect of deviations from expected norms (Van Greuning 1993: 44-46). The Van der Horst Report also indicated that the staff responsible for administering the regulations were poorly qualified and not remunerated well.

A further critical appraisal of banking regulation at the time is provided by Koseff[192] (1984) who analyses the failure of six South African banks[193] in the 1970s with regard to the reasons for failure in respect of each bank and the effectiveness of the regulations prescribed by the Registrar of Banks in terms of the Banks Act. Koseff (1984: 124) finds that the principle causes of bank failures were poor lending policies, especially relating to property companies, weak management and inadequate administration. It is argued that the Registrar of Banks was successful in

[192] Managing Director, Investec Bank Limited.

[193] Namely Spes Bona Bank Limited, Rand Bank Limited, Breda Bank Limited, Rondalia Bank Limited, Concorde Bank Limited and UDC Bank Limited, selected for being the better known and largest of the 9 banks that failed during this period.

preventing a major catastrophe from occurring in the banking industry by arranging take-overs of failed banks, and that the deposits lost in relation to the total funds deposited with banks were negligible. However, it is concluded that the information disclosed by the banks in their annual financial statements as well as in the returns to the Registrar of Banks did not provide enough meaningful information to provide bank supervisory authorities with advance warnings of possible deterioration in the financial condition of banks.

A number of highly interesting recommendations were also made by Koseff (1984: 50-52; 123-124). They are:

- increased disclosure of information by banks to regulatory authorities and the public at large to develop early warning indicators in order to effect corrective measures; [194]
- increased self-regulation by means of two-tier boards of directors for each bank, consisting of a supervisory board of directors (appointed from senior members of commerce and industry approved by the Registrar of Banks), in addition to a management board;
- an expanded role for external auditors in order to eliminate the need for an on-site inspection by the Registrar of Banks;
- that financial institutions that are not registered as banking institutions but effectively acted as deposit-taking institutions should be brought under the control of the Banks Act and the scrutiny of the regulatory authorities; and
- the introduction of deposit insurance as a means of protecting the smaller depositors.

It is also important to note that although South Africa was not a signatory to the 1975 Basle Concordant or the 1983 amendments thereto, the degree of internationalisation of the banking system resulted in South Africa accepting the principles incorporated in the agreement. In 1985, the then Minister of Finance, B. du Plessis, announced that the banking supervisory authorities were:

> '*reeds besig om met die toesighoudende owerhede van oorsese lande oor die implementering van die ooreenkoms saam te werk.*'[195]
> (Republiek van Suid-Afrika 1985: 842).

Consequently, South Africa desired to conduct banking supervision in accordance with international trends and requirements.

Brümmerhof (1988) conducted a comparative study regarding the off-balance sheet financing activity of banks. The following general points regarding banking regulation at the time were raised (Brümmerhof 1988: 422-429):

---

[194] On the other hand it can be argued that negative news may lead to a public run on the deposits of a bank.

[195] "already co-operating with foreign supervisory authorities regarding the implementation of the agreement" (writer's own translation).

- the time allowed for the rendering of supervisory returns is excessive by international norms;
- the use of average figures as opposed to month-end figures should be considered for supervisory returns;
- the German methodology of requiring mid-month figures may avoid some of the distortions inherent in month-end figures;
- information regarding large exposures to individual clients is only received bi-annually;
- the greater involvement of the auditing profession in the supervisory process is necessary;
- the quality of bank management as well as management information requires attention;
- the annual report issued by the banking supervisory authorities should be more comprehensive;
- a deposit insurance system should be considered in the interest of consumer protection; and
- information regarding the activities of banks as agents and brokers is required as these occur 'outside' the balance sheets of banks

Brümmerhof (1988) specifically criticised the regulation of banks' off-balance sheet activities. The points made were (Brümmerhof 1988: 426-430):

- more risk-related data on off-balance sheet activities is required;
- full disclosure of all banking activities is required;
- relevant information on off-balance sheet activities should be included in the calculation of monetary aggregates and are relevant in monetary policy;
- limitations on off-balance sheet exposures to individual clients or groups of related clients should be considered;
- no information on new instruments such as 'caps' is required and there are no capital adequacy requirements for these.

In conclusion, Brümmerhof (1988:428) points out the importance of the supervision of off-balance sheet activity by suggesting that if comprehensive and adequate information on contingent liabilities to foreign parties had been available the debt moratorium which was instituted on 31 August 1985 might have been avoided.

De Swardt (1994(b)) identifies three broad aspects of banking supervision that were at the time considered to be in need of reform, namely:

- the legal framework;
- the information supplied to the supervisory authorities in the prudential returns; and
- a more consultative approach to banking supervision needed to be adopted.

Many of the above suggestions were taken into account by the Technical Committee on Bank and Building Society Legislation which commenced its activities on 23 July 1987 under the chairmanship of Dr. C. J. de Swardt, then Registrar of Banks and

Building Societies. The findings of this Committee eventually resulted in the passing of the 1990 Banks Act which comprehensively revised South African banking legislation. The Act emphasises *risk-management* as the basis for regulation and the supervision of banks.

6.4.2 Supervisory Approach

The Banks Act (Act 94 of 1990) provides for the establishment of an Office of the Registrar for Banks, which as part of the South African Reserve Bank, is responsible for the supervision of banks. The Office of the Registrar for Banks, more generally called the Banking Supervision Department sees its mission as creating:

> *'a regulatory and supervisory environment that will facilitate the optimisation of the quality and effectiveness of financial risk-management in the system'* (Oosthuizen 1994: 3).

As in Germany, supervisory authorities rely on clear rules and guidelines instead of moral suasion. However, the South African approach focuses on both the rules and the principles underlying effective risk-management rather than a narrow rule-based interpretation. As such the South African approach of risk-management can be regarded as a hybrid of the German and UK approaches.

This risk-management approach is effected by striving for a true partnership between various key players[196] in the risk-management process, namely:

Those directly or indirectly appointed by the shareholders:

- board of directors[197];
- management of the bank;[198]
- audit committee and internal auditors;[199] and
- external auditors.[200]

---

196 The roles and responsibilities of each of these key players have been described by Van Greuning (1993), and South African Reserve Bank (1991: 6-8); (1992: 7-8); and (1993: 12-13).

197 Section 60 of the 1990 Banks Act codifies the common law responsibilities of directors as follows: 'Each director should stand in a fiduciary relationship to the banking institution ... of which he is a director.' Regulation II of the Regulations to the Banking Act states that one of the fiduciary responsibilities is that a director must understand that the conduct of the bank's business entails the management of risks and understand that a bank's primary source of funds constitutes deposits from the general public. Therefore, it is the duty of directors to ensure that the risks are managed in a prudent manner.

198 The management team of a bank is the single most important factor determining the success of an institution. By definition, management is appointed by the board of directors which delegates the powers and responsibilities to perform the day-to-day management of the bank. In the course thereof, management performs the detailed risk-management inherent in banking which requires a high degree of competence in identifying and managing the different risks (South African Reserve Bank 1993(a): 12-13). It is therefore imperative that members of management are 'fit and proper' persons capable of fulfilling their responsibilities. The 'fit and proper' concept encompasses both appropriate ethical standards (such as integrity) and appropriate knowledge, experience, skills and judgement.

199 Vide infra paragraph 9.2.3.2.

200 Vide infra paragraph 9.2.3.2.

Other stakeholders:

- the public;[201] and
- regulatory / supervisory authorities.[202]

This approach developed by Van Greuning (1993: 78-95) provides a cohesive framework for the identification and role clarification for each of the key players in the risk-management process. The success of this framework depends on all key players understanding their role and fulfilling it to the best of their ability. Each has a different, but important, function in ensuring that risks are competently managed and that due regard is given to the fiduciary role that banks fulfil as custodians of the public's savings. It is important to note that the existence of a supervisory authority in no way diminishes the responsibilities of the management process.

To enable the implementation of its risk-management approach, the Banking Supervision Department has also defined a model whereby each of the aforementioned six key players is responsible for a *dimension* of the following nine major risk areas (South African Reserve Bank 1993(a): 5):

- balance-sheet structure and changes therein;
- capital adequacy;
- profitability;
- liquidity risk;
- interest-rate risk;
- market (price / position) risk
- credit risk;
- currency risk; and
- operational and technological risk.

Consequently, the South African supervisory approach meets the theoretical requirements of banking regulation as formulated in paragraph 3.4. The South African regulators have clearly recognised that banking effectively amounts to the managing of financial risks and that banking regulation should aim at the optimisation of banks' risk-management. Although South African banking supervisors have not adopted the very informal supervisory style of their UK counterpart, a great deal of

---

[201] Neither sound risk-management nor appropriate regulation takes away the responsibility of investors for their own decisions. Consumers need to protect themselves by assessing the risk-profile of the financial institution in which they are investing, as well as understanding who is assuming the risk, i.e. they themselves as investors, acting through agents, or the financial intermediaries as principals.

[202] The mission of South African bank regulators indicate understanding by regulators that they cannot prevent bank failure, but that it is nevertheless imperative for them to identify clearly what they are capable of achieving. The subsidiary goals of the Banking Supervision Department is to achieve the following: creation of a public understanding of management's responsibility in the risk-management process; extension of confidence in the banking sector; creation of level playing fields between different financial institutions and providers of financial services; establishment of a free-market orientation towards bank supervision; and establishment of a professional supervisory function (Van Greuning 1993: 93).

consultation with regulated institutions occurs prior to the enactment of legislation or the adoption of regulation. This allows banks to comment on regulations with reference to the overall objective of optimising risk-management. Once implemented, though, banks are required to adhere to the risk regulations which they assisted in developing. Consequently, the supervisory style is neither strictly formal nor very informal but a combination of both.

6.4.3 Supervisory Methodology

The South African methodology of supervision is primarily off-site. However, it does incorporate what it sees as the best of on-site supervision, namely the verification of obtained information by means of meetings with the various key players in the risk-management process (Oosthuizen 1994: 6).

Limited on-site supervision and interaction takes the form of quarterly meetings with banks and annual trilateral discussions between a bank's audit committee, its external auditors and the supervisors, as well as annual presentations to the board of directors, top management, risk managers and external auditors. Once a year the Banking Supervision Department also makes a graphic presentation to the directors and management of each bank, in which the information supplied by the management of the relevant bank is compared with statistics and trends for the banking sector as a whole. The same exercise is carried out on a quarterly basis with the managers responsible for the different risk areas of the respective banks.

In the process of interaction with various key players, the duties and responsibilities of each are continually highlighted and emphasised. The interaction promotes communication and co-ordination and ensures that the supervisor remains in contact with the market. Because interaction with the key players at various levels of seniority is achieved, the effectiveness of the supervisory process is enhanced. This methodology is based on the concepts of accountability and risk-management, and ensures that the focus of supervision is not on the mechanistic application of various analytical techniques, but rather the optimisation of the banking system's effectiveness (South African Reserve Bank 1993(a): 11).

The advantages of the South African approach is that it avoids a duplication of the work done by the external auditors of banks. When risk-management areas are identified that require more in-depth on-site supervision, the skill and expertise of external auditors and other specialists are used to assist in investigations and to provide inputs on areas of concern. As this obviates the need for an inspection division, this methodology is also less expensive than the on-site version. Finally, off-site supervision does not create the illusion that supervisors are able to timeously identify and solve the problems that lead to bank failures, which could result in moral hazard (Oosthuizen 1994: 6; South African Reserve Bank 1993(a): 11-12).

6.4.4 Relationship with other Regulatory Bodies

6.4.4.1 Registrar for Financial Institutions

For many years the responsibility for supervision of the financial services industry was imposed by legislation on the office of the Registrar for Financial Institutions. The Financial Institutions Office was established in 1956 as a branch of the Department of Finance. It proved impossible for that office to fulfil the task of financial supervision of the financial services industry efficiently, as it was not possible to obtain and retain trained and professional staff due to the uncompetitive Public Service remuneration packages.

In the Report of the Commission of Inquiry into the Winding-up of the Short-term Insurance Business of the AA Mutual Insurance Association Limited (1988 paragraph: 4.6) the following remark appears: 'It would appear that the difficulties in the Office of the Registrar were, and are, caused, in the main, by the lack of suitably qualified permanent staff. This is apparent from the various annual reports of the Registrar and the evidence before the commission. This shows that apart from the shortage, there has been an almost complete change in the staff supervising short-term insurance over the past few years.'

As a result of this finding the above Commission (1988 paragraph: 4.6 (e)) made the following recommendation: 'a commission or working group should be appointed to consider the creation of a national council or board for financial institutions on the lines of the National Energy Council.'

6.4.4.2 The Van der Horst Committee and the Financial Services Board

The Government accepted the Commission's recommendation and on 14 November 1988 The Van der Horst Committee of Inquiry was appointed to consider the recommendation of the previous Commission. The Van der Horst Committee completed its investigation during September 1989 and a report was submitted to the Government in which the Committee stated that it had among other factors found the following:

> *'The institutions supervised by the Financial Institutions Office, and the Acts that this Office administers are of significant extent and import. Almost 13 000 institutions are registered with the Financial Institutions Office of which 12 484 pension funds, 90 insurers and 45 unit trusts are included. The assets of these institutions exceeded R150 billion in 1987 and will be significantly more now. This represents the major portion of the long-term savings of the country and there are very few South Africans whose financial well-being is not affected by these institutions. It is thus of the greatest national interest that the Financial Institutions Office should exercise effective supervision over financial institutions and that the financial structure and markets should be adapted to keep abreast with changes. The Committee supports in full the findings of the Financial Institutions Office and the Melamet Commission and is of the*

> *opinion that it is of the utmost importance that the staff problem of the Financial Institutions Office should be resolved urgently. The evidence received by the Committee strongly indicates that a solution of the problem experienced with the remuneration and staff structure of the Financial Institutions Office simply cannot be foreseen within the present framework of the Public Service and that the shortage of expertise will in these circumstances continue. The Committee thus unanimously came to the decision that the establishment of a statutory body would be the most effective way in which the current problems of the Financial Institutions Office can be solved. This is highly recommended.'* (Van der Horst Verslag 1989: 8-10).

The Government accepted the findings and recommendations of the Van der Horst Committee and the Financial Services Board Act, was promulgated on 11 July 1990 which provided for the establishment of the Financial Services Board (FSB) on as a statutory board with the following functions:

- to supervise the exercise of control, in terms of any law, over the activities of financial institutions and over financial services; and
- to advise the Minister on matters concerning financial institutions and financial services either of their own accord or at the request of the Minister.

6.4.4.3 Banking Supervision and the Reserve Bank

The South African Reserve Bank has, as one of its subsidiary objectives, the maintenance of the stability of the financial system. However, it was only in 1987 (as mentioned above) that it accepted a supervisory responsibility over deposit-taking institutions.[203] As a result of later losses suffered by depositors and investors, the Reserve Bank was exposed to criticism regarding its application of emergency assistance measures. Taking into account that negative publicity resulting from bank failures could impact on the effectiveness of the Reserve Bank in the performance of its primary functions, it was considered necessary to determine whether it would be more appropriate to locate the bank supervisory function outside of the central bank. The problem was described as follows by the Reserve Bank (1992: 6):

> *'...regulation and supervision of banks, however, has the potential to create the illusion that an 'implicit' contract exists, in terms of which depositors believe that because banks are regulated, the safety of their deposits is assured. The increasing convergence of services provided by different financial intermediaries, with banks providing a wide array of financial services and non-financial companies entering the banking sphere, has exacerbated the problem. Because of the existence of bank regulation and supervision, many investors at institutions other than banks (as well as depositors with banks) mistakenly believe that their funds are automatically safe or even guaranteed.'*

[203] The Supervision of other financial institutions was transferred from the Department of Finance to the statutory Registrar of Financial Services.

This occurred at a time when the general need for a greater co-ordination of financial regulation was recognised. The insufficient consistency in financial legislation and supervision was due to the existence of two regulatory authorities and the independent development of different forms of financial regulation. Greater co-ordination was needed on account of the general tendency towards multi-functional financial institutions[204] (or financial conglomerates) and the need for consolidated supervision. In addition, gaps in the regulatory structure were highlighted by certain institutions[205] in the financial sector which were not covered by the existing jurisdictions of the regulatory authorities (De Swardt 1993: 11).

6.4.4.4 Masterbond and the Nel Commission

As so often happens, the gaps in the regulatory net were accentuated by the failures of two financial 'institutions' which were actually participation bond schemes, namely Masterbond and Supremebond. The Masterbond group (i.e. Masterbond Trust Investment Holdings and its 84 offshore and other associates) collapsed early in 1992, separating more than R500 million from more than 20 000 investors. The activities of Masterbond (which sold debentures and participation bonds to the general public) were akin to deposit-taking. Yet, as no part of the group was registered as a deposit-taking institution it did not fall under the supervisory ambit of the banking regulators. Under the definition of the Financial Institutions (Investment of Funds) Act, it could be argued that Masterbond Participation Bond Trust Managers was a financial institution and as such subject to regulation by the FSB (Finance Week 1992: 33). Yet anecdotal evidence suggests that the FSB declined supervisory responsibility even when early warning signals were brought to their attention. A lack of understanding of the functions and responsibilities of the various supervisory agencies resulted in fierce criticism of the South African Reserve Bank (South African Reserve Bank 1992: 4).

The failure of Masterbond prompted the State President to appoint a judicial commission under the chairmanship of Justice Hennie Nel to 'assess the question whether the common law and legislation relating to deposit-taking institutions, other financial institutions, companies' share block and timeshare schemes, and any other relevant statutes, provide sufficient protection for investors similar to those of the Masterbond group and the public in general.' (Finance Week 1992: 33). The Commission was also asked to inquire and report on whether any functionary seized with statutory duties 'neglected any duty to look after the interests of investors or the public.' (Finance Week 1992: 33). At the time of writing the Nel Commission was still in the process of investigation and consequently the confusion reigning as to the appropriate supervisory authority for Masterbond had not been formally solved.

---

[204] For instance, ABSA Bank Limited (South Africa's largest banking group) encompasses not only a number of banks (Volkskas and Trust Bank) and previous building societies (United and Allied) but also a life insurance company (ABSA Life), a short term insurance company (ABSA Insurance Company), wills, administration, deceased estates and tax services (ABSA Trust) and a unit trust company (ABSA Fund Managers), amongst others.

[205] Most notably the Masterbond and Supreme debacles.

However, the need for closing regulatory loopholes across the financial system was clearly recognised.

Nevertheless, a letter written by the secretary of the commission, Mr S.E. Mostert to the Financial Services Board, indicates that the Nel Commission favours a single regulatory authority. The Nel Commission states that the fragmentation of supervision between the Registrar of Banks and the FSB has led to inadequate supervision in the case of Masterbond, Supreme and Owen Wiggens. Letters written in 1994 between the Financial Services Board and the Registrar of Banks indicate such a lack of mutual respect that combined supervision became very difficult to maintain (Finansies en Tegniek 1996: 14).

6.4.4.5 The Jacobs Committee

In September 1992, the Committee of Investigation into the Promotion of Equal Competition for Funds in Financial Markets in South Africa (the Jacobs Committee), recommended the implementation of a holistic approach to the regulation of financial services, as well as better co-ordination between the different regulatory authorities. In regard to the regulatory structure, the Jacobs Committee proposed that, instead of the Registrar of Banks reporting to the Governor of the Reserve Bank, both the Registrar and the Executive Officer of the FSB should report to an independent Financial Regulation Policy Board (Republic of South Africa 1992: 110).

This recommendation was intended to ensure better co-ordination between regulators, as well as preventing the image of the Reserve Bank, as the central monetary authority, from being tarnished by regulatory and supervisory issues. Such a change was also seen to be in line with the international trend towards the integration and specialisation in the provision of financial services. Nevertheless, this was not intended to preclude access by the central bank to micro-economic data on banks that might be required when decisions regarding the provision of emergency assistance were to be made (South African Reserve Bank 1992: 6).

6.4.4.6 The Melamet Committee

The Melamet Committee was subsequently appointed to enquire into the feasibility and implementation of the Jacobs Committee's proposals. At the end of March 1993 the Melamet Committee submitted its report. The Melamet Report (1993: 4) stated that the need for a holistic approach to financial regulation is founded principally on the regulatory gaps which occur as a result of:

- different philosophies and practices between regulators;
- the lack of supervision and enforcement in many instances where regulation is in place but not given effect to; and
- the existence of three main regulatory structures - The South African Reserve Bank, the Financial Services Board, and the Companies Office - each with its own areas of jurisdiction.

The Melamet Report (1993: 4) argues that the division of regulatory responsibility:

'does not give the necessary overall control of all financial activities which affect systemic risk in the financial sector, or which affect reasonable protection to the general public. With the international and national trend towards financial conglomeration and new product development where older, more specific structures are becoming inadequate it is necessary to consider financial supervision from a 'top down' holistic perspective.'

The Melamet Committee consequently endorsed the feasibility of a holistic approach to the regulation of financial institutions and recommended that a single regulatory authority, the Financial and Investment Services Commission (FISC), should be created to assume responsibility for co-ordinating regulatory policy. The Melamet Report (1993) furthermore recommended that FISC should be constituted as an integrated body, into which should be merged the Office of the Registrar of Banks, the Financial Services Board (FSB), the Office of the Registrar of Companies and any other relevant supervisory authority.

Comments received from interested and affected parties on these recommendations persuaded the government that the time was not yet opportune to integrate existing regulatory offices into a single structure. Consequently, the government decided to adopt the recommendation of the Jacobs Committee and to establish the Policy Board for Financial Services and Regulation (Policy Board). As Dr. C.J. De Swardt,[206] Deputy Governor of the South African Reserve Bank and Chairman of the Policy Board motivates: 'there is still a concern that the supervision of the banking sector must be subject to the control of the Reserve Bank so as to enable the Bank to deal expeditiously with systemic problems when they arise. The banking and payment system could be disrupted if the close relationship with banking supervision were to be altered.' (De Swardt 1993: 10-11).

6.4.4.7 The Policy Board

The Policy Board started functioning on 1 July 1993 and was transformed into a statutory body in November 1993 by virtue of the Policy Board for Financial Services and Regulation Act (Act 141 of 1993). The Policy Board was not provided with any executive powers but has the responsibility of formulating and co-ordinating policy relating to the further development of the financial sector (including financial markets) and to financial regulation. The Policy Board acts as adviser to the Minister of Finance and the areas of advice include developments in the financial services sector, changes in the regulatory structure, amendments to existing financial legislation, and improvements in financial supervision. The responsibility for the execution of financial regulation policy remains with the Reserve Bank and the Financial Services Board. The Policy Board is in many respects the South African counterpart of the SIB in the UK.[207]

---

[206] It is interesting to note that, in his capacity as a member of the Melamet Committee, Dr. De Swardt visited regulatory authorities in two foreign countries, namely Germany and the UK.

[207] See Diagram 6.1.

The conceptual framework within which the Policy Board functions consists of a general philosophy, a set of objectives for financial regulation and a set of principles to support the adopted philosophy and objectives. As a general philosophy, the Policy Board adopts a market-orientated and consultative approach to financial regulation. The objectives relate to the safeguarding of efficiency and stability of the financial sector and the promotion of investor interests. It is emphasised that financial regulation should not be employed as a means of achieving the wider economic and social objectives of political authorities (De Swardt 1994(a): 2).

A set of sixteen guiding principles is identified, of which De Swardt (1994(a): 3) mentions the following specifically:

- securing competitive neutrality among financial institutions, other financial service providers and financial market participants whenever they compete in the same segment of the financial sector;
- promoting the proper assessment and management of risks and adherence to appropriate fit and proper standards in the conduct of business;
- ensuring that regulatory arrangements are practitioner based and sufficiently flexible to adjust to the evolution of the financial system; and
- striving to achieve effective and cost-efficient regulation.

The Policy Board focuses on four broad areas of financial regulation (De Swardt 1994(a): 5). The first area of focus is the elimination of gaps in the regulatory structure. De Swardt (1993: 11) envisages the development of a set of minimum requirements relating to registration, a code of conduct, proper disclosure and capital adequacy, to which all intermediaries acting as agents would have to adhere. There would be a legal requirement to register with the Policy Board or a self-regulating trade organisation. Thereafter it would be up to the various trade organisations to apply more stringent membership requirements over and above the legal minima laid down by the Policy Board.

An example of this focus area is the recommendations made by the Investment Business Advisory Committee (1995) which was appointed by the Policy Board to investigate the regulation of investment services in the non-securities field. The committee recommended the introduction of such regulation in South Africa with the emphasis primarily on the enhancement of investor protection and the focus on the market conduct of investment advisers (rather than on compliance with prudential standards). The Committee saw the need for direction by the regulatory authorities in order to elevate regulation from self imposed (low-intensity) to self-regulatory (medium-intensity) regulation. It proposed the establishment of an Investment Service Co-ordination and Registration Office (ISCRO) which should be responsible for co-ordinating regulation carried out by the self-regulatory bodies with the FSB as the ultimate regulatory authority (Investment Business Advisory Committee 1995).

The second focus of the Policy Board concerns the enhancement of quality standards and competitive neutrality in existing financial legislation. The purposes of such quality enhancement of financial legislation are to promote, through explicit and

uniform requirements, the achievement of regulatory objectives and to attain the maximum degree of competitive neutrality among providers of financial services. Requirements will cover such matters as fit and proper standards, internal and external auditing procedures, risk-management, prudential standards, risk-based information bases for supervisory purposes, full disclosure, consultation between regulators and regulated entities and appeal procedures (De Swardt 1994(a): 5).

The third focus area concerns the harmonisation of financial regulation in South Africa with international standards and practices in order to reduce systemic risks emanating from cross-border financial services and transactions, and to facilitate South Africa's reintegration into the international financial system (De Swardt 1994(a): 5).

The fourth focus area concerns the adequacy of the existing financial services structure to meet the financial services demands of a future South Africa. Relevant issues are the expansion of financial services to satisfy the needs of a broader community of users[208] and the improvement of the accessibility of financial services to such a community without sacrificing sound prudential standards (De Swardt 1994(a): 5).

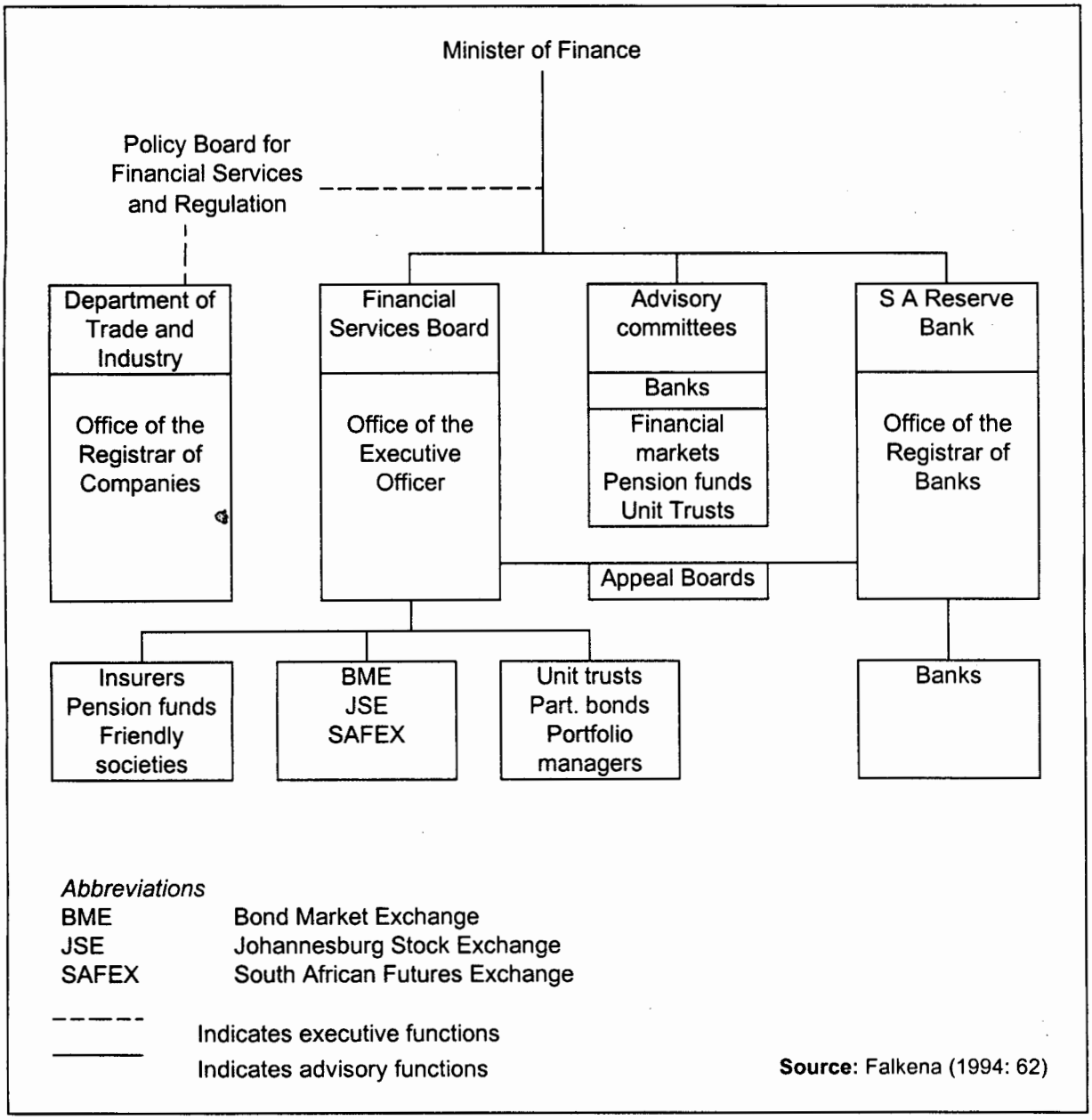
Structure of South African Regulatory Authorities

The present regulatory structure in South Africa, pursuant to the establishment of the Policy Board, is depicted in Diagram 6.2.

Whilst the Office of the Registrar of Companies remains within the organisational structure of the Department of Trade and Industry, the Registrar of Companies may be invited, together with the Registrar of Banks and the Executive Officer of the FSB, to attend meetings of the Policy Board. The Office of the Registrar of Banks remains under the control of the Reserve Bank, but regulatory responsibility extends to the Minister of Finance. Similarly, the Office of the Executive Officer of the FSB remains under the control of a reconstituted FSB, but the regulatory responsibility also extends to the Minister of Finance.

[208] The integration of the presently underbanked informal black communities into the formal banking sector is discussed by Hurst (1994) and Moore and Schoombee (1993).

Diagram 6.2 Structure of South African Regulatory Authorities



The structure of South Africa's regulatory authorities does indeed represent a more holistic approach to the regulation of financial services and the co-ordination of regulation by the different regulatory authorities. However, it is also clear that the proposals of the Jacobs Committee report were not fully met by this structure.[209]

[209] The Financial Institutions Amendment Bill, which is presently still being discussed with all affected parties, proposes *inter alia* the following: broadening the definition of 'financial institutions'; explicit identification of the appropriate Registrar for various financial institutions, provision for curatorship on a voluntary basis; inspection of financial institutions; empowering the Executive Officer of the Policy Board to act against undesirable practices employed in the financial services industry; establishment of advisory boards which the Executive Officer may consult on technical matters relating to the industry and its proper regulation; disclosure by the Executive Officer of certain information to other domestic and foreign regulators of the financial services industry; and the creation of a single board of appeal in respect of all financial services industries to which persons may appeal against decisions taken by the Executive Officer. Once again, the majority of these proposals are to be welcomed as

Oosthuizen (1994: 4) criticises the uncertainty regarding the reporting responsibilities as well as the powers of the Policy Board (i.e. advisory *versus* executive) under the new regulatory structure. It is argued that it is vital for the Policy Board to have executive powers in order to give full effect to the proposals of the Jacobs and Melamet Reports. The point is made most eloquently and coherently in the Melamet Report (1993: 12) itself:

> *'The arguments for the retention of banking supervision within the central bank of a given country are not cogent enough for the committee to be persuaded that (with) increasing conglomeration in the financial sector, involving centrally the banks, can be adequately catered for by a co-ordinating mechanism. In principle, the concept of a co-ordinating body made up of disparate regulators fulfilling an advisory function is suspect. It is likely to become a debating society for vested interests and, without being charged with responsibility nor clothed with authority, it is difficult to see how an effective holistic regulatory approach can be satisfactorily devised yet alone implemented.'*

Also, as can be seen from Diagram 6.2, some sectors of the financial services industry, such as trust companies and operators in the securities markets are not represented at all (South African Reserve Bank 1993(a): 9).

Finally, a holistic approach to supervision acquires additional importance in view of the increase in the number of entities entering the domestic market and the corresponding number of South African entities entering foreign markets (South African Reserve Bank 1993(a): 6).

---

these represent a further step towards eliminating regulatory gaps and to achieve greater competitive neutrality between financial institutions, yet the stated goal of the Policy Board relating to uniform mimimum standards will not be attained. Similarly, the strengthened position of the Policy Board and the establishment of a single appeal board is a bold step forward. Neverthless, the integration of all regulatory bodies into a single, powerful body remains to be achieved.

6.5 Summary and Conclusion

A comparison of regulatory authorities in the UK, Germany and South Africa has, as was to be expected, revealed both common ground and areas of diversity. Until relatively recently, UK regulatory authorities have maintained a very informal supervisory style which was not anchored in strict regulations. A change in this mode of supervision only came about as a result of bank failures, which may entail a move towards a more systematic risk assessment of banks and lesser reliance on an off-site supervisory methodology.

The 1979 UK Banking Act remains exceptional for the informal supervisory approach it favours. Although tribute needs to be paid to the general quality of banking supervision conducted in the absence of prescriptive quantitative regulations, the overall supervisory system suffers from some conceptual weaknesses such as the distinction made between banks and building societies. The implementation of the lead-regulator approach in order to facilitate co-operation between domestic regulatory authorities represents a combination of functional and institutional regulation. However, the multiplicity of UK regulators reduces the effectiveness of overall supervision.

Whereas the UK approach to supervision is largely informal and the regulations applying to banking institutions are subjectively applied, the German banking regulations have generally been far more rigid and formally enforced and have also been built on a much older historical base dating to 1934. Since that time, banking regulations have evidenced a remarkable consistency, with the main changes prompted by EC directives, with the aim of harmonising banking regulations across borders. The FBSO provides an example of how close co-operation with the central bank can be obtained by an independent regulatory authority. To a large degree, the German system of universal banking obviates the question of regulatory co-operation.

Whilst the first proper legal framework for banking supervision in South Africa only came into being in 1965, the present system of banking supervision is both advanced - due to the recognition of risk-management as the prime supervisory issue - and unique - in terms of the role-player approach to sharing the responsibility of the risk-management process. Similarly, the holistic approach to overall financial supervision represents a clear conceptual paradigm according to which financial institutions are regulated. However, the objectives of holistic supervision have not yet been fully met in practice. While there is evidence of a high degree of structural deregulation in South Africa, this has been accompanied by a growth in risk-related banking regulation to address the growing sophistication of risk-management practices by banks.[210]

---

[210] Fortunately, none of the three systems display a regulatory structure as confusing as that of the United States. The US Secretary of State, Lloyd Bentsen (1994) calculated that the creation of a single federal agency to assume the overlapping supervisory responsibilities of the Office of the Comptroller of the currency, The Federal Reserve Board, the Federal Deposit Insurance Corporation and the Office of Thrift Supervision would save some $ 150 - 200 million per annum.

The research problem of this dissertation is that financial regulation addresses the risk-management activities of banks. This Chapter has demonstrated that this research problem is borne out by regulatory changes in all three financial systems which have historically come about either as a response to bank failures (which cruelly exposed bad risk-management practices by the institutions concerned and the lack of regulatory control thereof), or the realisation by regulatory authorities that existing legislation did not adequately regulate risk activities by banks.[211]

Table 6.1 provides a summary of three regulatory authorities as discussed in this Chapter.

Table 6.1 Regulatory Authorities in the UK, Germany and South Africa

	UK	Germany	South Africa
Supervisory approach			
Rules vs Principles	Principles rather than strict rules	Narrowly rule-based	Rules and Principles
Formal vs Informal	Informal	Formal	Formal and Informal
Supervisory methodology			
On-site vs Off-site	Off-site	Off-site	Off-site
Interaction with bank management	Frequent	Infrequent	Frequent
Regulatory authorities			
Central Bank Department	Yes	No, but close interaction with Bundesbank	Yes
Co-ordination of regulation by a single body	Lead-regulator	No overlapping jurisdictions	Yes, but Policy Board does not have executive powers

The differing approaches to regulation in the selected countries should be kept in mind when comparing the components of regulation in Chapters 7 - 9. In the UK, lesser use will be made of strict rules to enforce risk-management. In Germany a legalistic approach is utilised to effect appropriate risk-management by banks, although this is not clearly stated as an objective by the regulatory authorities, while in South Africa the principles of risk-management shape the supervisory approach.

There is no single 'correct' supervisory approach, as these merely reflect the efforts of regulatory authorities in each financial system to most effectively supervise banking risks. The approach has varied from narrowly rule-based Germany to a more principle-based approach as was evident in the UK. South Africa displayed hybrid characteristics as it combines clear rules and guidelines with the underlying principles thereof in applying banking regulation. In practice, a combination of objective rules and a subjective assessment of management quality may provide the best results. This conclusion may be likened to a game of rugby, with the supervisor as referee and the banks as players. Whilst a proper rulebook is indispensable to allow fair play, it is not a sufficient tool to judge the quality of play, which is what the game is really about. Similarly, the supervisory approach may be formal (as in

[211] The latter consideration includes the efforts by the BIS and the European Community to introduce communality in banking supervisory guidelines.

Germany) or informal (as in the UK). Again, the South African supervisory approach marries both extremes. The South African system merits being singled out as having the only regulatory authority which explicitly recognises that the supervisory approach entails the optimisation of financial risk-management.

Moreover, SA banking regulation is unique in identifying the key players involved in the overall risk-management process and in spelling out the responsibilities of each.

All three regulatory authorities have adopted an off-site supervisory methodology although the Bank of England has recently indicated that it intends paying more attention to on-site supervision. UK and South African regulators interact frequently with the regulated banks while German bank management seldom has direct contact with the FBSO and Bundesbank.

It is unfortunate that the present overall structure of South African regulatory authorities does not comply fully with the recommendations of the Jacobs and Melamet Committees. The institution of a single and integrated regulatory authority with executive powers would have allowed for a combination of institutional and functional regulation which is required in view of the conglomerate nature of modern financial institutions. The common ground for such synchronisation can be found in the fact that risk identification and risk-management are common to both the institutional and functional approaches.

CHAPTER 7

THE REGULATION OF DEPOSIT-TAKING INSTITUTIONS IN THE UNITED KINGDOM

7.1 Introduction

This is the first of three country-specific Chapters dealing with the regulation of deposit-taking institutions; in this case with that of the UK. The outline that has been adopted is derived from the framework expounded in Chapter 4. It broadly covers prudential and protective regulation; and monetary requirements.

Prudential measures are those aimed directly at managing the levels of risks assumed by deposit-taking intermediaries. Protective measures, on the other hand, offer protection to depositors or to the deposit-taking intermediaries themselves. However, no clear-cut separation can be made as these measures interrelate in several ways, with risk exposure being the most obvious consideration. M*onetary measures* have a different economic justification and are therefore distinguished as a separate regulatory category.

Components of prudential regulations include entry requirements, permissible business activities, disclosure requirements, capital adequacy, liquidity requirements and risk asset limits. Components of protective measures include various forms of deposit insurance and crisis management facilities. The components of monetary controls that are discussed are reserve requirements, interest rate controls, credit ceilings and allocation by regulation.

The research problem of this study states that in practice, regulatory frameworks reflect the realities of deposit-taking financial intermediation, namely risk-management. As such, prudential regulatory frameworks are designed to influence the management of financial risks by banks; whereas protective regulations aim to counteract the economic problems which arise when individual banking institutions have exposed themselves to a higher than acceptable level of overall risk. The validity of this research problem is inter alia borne out by the great influence which UK bank failures (caused by excessive risk-taking) have had on UK banking regulation. More recent bank failures such as in the case of BCCI (1992) and Barings Bank (1995) have both resulted in changes to the UK Banking Act and supervisory procedure which have improved the regulation of the risk-management activities of banks.

This Chapter details how the present UK regulatory framework seeks to influence the risk-management activities of banks; from the setting of entry levels through to the establishment of formal and informal exit arrangements for banks.

When considering the components of UK regulation the reader should keep in mind the informal style of supervision which is preferred by the UK authorities.

Accordingly, many of the regulations provide only loose guidelines and a flexible framework within which the Bank is allowed considerable room to manoeuvre. Similarly, the risk-assessment of banks is conducted subjectively and informally, although a move to a greater degree of formalism is evident in the UK.

7.2 Prudential Regulation

Regulations concerning entry requirements are intended to serve the prudential purpose of ensuring the soundness of new banking institutions as well as detailing the ethical and skill capability of bank management to manage banking risks.

7.2.1 Entry Requirements

7.2.1.1 Licensing and Ownership Control

Schedule 3 of the Banking Act 1987[212] sets out the criteria that an institution has to comply with before authorisation for registration may be granted by the Bank. The minimum criteria can be summarised as follows:

- the directors, controllers and managers of the institution must be fit and proper to hold the respective positions (Paragraph 1);
- the business of the institution must be directed by at least two individuals (Paragraph 2);
- in the case of UK-incorporated institutions there must be an appropriate number of non-executive directors (Paragraph 3);
- the institution conducts, or will conduct, its business in a prudent manner (Paragraph 4);
- the business of the institution must be conducted with integrity and skill (Paragraph 5); and
- the institution must have, at the time of authorisation, minimum paid up capital and reserves of ECU 5 million (Paragraph 4(3A)) or an amount of equal value in another currency.

In May 1993 the Bank published a new set of principles[213] it uses in applying the above authorisation criteria.

Fit and proper

Paragraph 1(2) of Schedule 3 provides that in determining whether a person is 'fit and proper' regard shall be given to the individual's professional probity, competence and soundness of judgement, and the diligence with which he / she fulfils or is likely to fulfil his / her responsibilities. Any threat or likely threat to the interests of

---

[212] This Chapter contains numerous references to the 1987 Banking Act. Except where otherwise indicated, the words 'section' or 'Schedule' may for purposes of this Chapter be regarded as referring specifically to this Act, whereas 'paragraph' refers to paragraphs under the various Schedules of the Act unless otherwise stated. Likewise, 'Bank' refers to the Bank of England.

[213] The approaches taken by the Bank relating to capital and liquidity adequacy and to the adequacy of provisions are covered in paragraphs below.

depositors or potential depositors which may arise by the holding of that position, will also be of fundamental importance.

With regard to a person who is, or is to be, a director, chief executive, managing director or manager (as defined in section 105 of the Act), the relevant considerations include whether he has sufficient skills, knowledge, and soundness of judgement properly to undertake and fulfil his particular duties and responsibilities. The standards required of persons in these respects will vary considerably, depending on the precise position held by the person concerned. Thus a person could be fit and proper for one position but not fit and proper for a position involving different responsibilities and duties. The diligence with which he is fulfilling or is likely to fulfil those duties and responsibilities is also considered, so that the Bank can assess whether the person does or will devote sufficient time and attention to them (Bank of England 1993: paragraph 2.44).

The probity of the person concerned is very important: it is essential that a person with responsibility for the conduct of a deposit-taking business is of high integrity. In contrast to the other elements of the fitness and properness criterion, the level of probity required will tend to be much the same whatever position is held (Bank of England 1993: paragraph 2.45).

In assessing whether a person has the relevant competence, soundness of judgement and diligence, the Bank considers whether the person has had experience of similar responsibilities previously, his record in fulfilling them and, where appropriate, whether he has appropriate qualifications and training. As to his soundness of judgement, the Bank looks to, *inter alia*, the degree of balance, rationality and maturity demonstrated in his conduct and decision-taking (Bank of England 1993: paragraph 2.46).

Business to be directed by at least two individuals

Paragraph 2 of Schedule 3 requires that at least two individuals must effectively direct the business of the bank. This is commonly referred to as the 'four eyes' principle. The Bank's principal aim is to ensure that at least two minds and four eyes are applied to the formulation and implementation of all significant decisions and day-to-day policies of the institution. In addition, 'both persons must have sufficient experience and knowledge of the business and the necessary personal qualities to detect and resist any imprudence, dishonesty or other irregularities by the other person' (Bank of England 1993: paragraph 2.33).

The four eyes principle aims to prevent excessive risk taking by any one individual.

Composition of the Board of Directors

Paragraph 3 of Schedule 3 provides that the directors include such a number of persons without executive responsibility for the management of its business as the Bank considers appropriate, taking into account the institution's circumstances and the nature and scale of its operations. This requirement for certain institutions to

appoint non-executive directors is an innovation of the Act. It is clear from the Bank's Statement of Principles that it attaches considerable importance to the role of non-executive directors, placing particular value on their ability to bring 'an outsider's independent perspective to the running of the business and in questioning the approach of the executive directors and other management' (Bank of England 1993): paragraph 2.35). The Bank also considers non-executive directors to have a particularly important role as members of an institution's audit committee. The Bank recognises that some small authorised institutions may find it difficult to appoint sufficient, suitable non-executive directors for an audit committee to be established; nevertheless, it is committed to the principle that authorised institutions and banking groups should have such a committee, unless there are sound reasons to the contrary (Bank of England 1993: paragraph 2.36).

The regulations relating to composition of the Board of Directors seek to bring objectivity and independence to the high-level risk-management process in a bank.

Business to be conducted in a prudent manner

Paragraph 4 (1) of Schedule 3 requires that the institution conducts or, in the case of an institution which is not yet carrying on a deposit-taking business, will conduct its business in a prudent manner. The 'prudent manner' criterion is the standard which is the most relevant to the interests of depositors. It is also fundamental in assessing whether the institution's directors, controllers and managers are fit and proper persons to hold their respective positions.

Sub-paragraphs 4 (2) to 4 (8)[214] specify a number of conditions which are to be taken into account in determining whether a particular institution is conducting its business in a prudent manner. However, sub-paragraph (9) makes it clear that the detailed requirements contained in sub-paragraphs (2) to (8) are not exhaustive. As the Bank points out in its Statement, there are other considerations, above and beyond these statutory criteria, which it must take into account when determining whether the business is being conducted prudently, namely that it is in the interests of depositors and potential depositors (Bank of England 1993: paragraph 2.4). These additional considerations include: 'the institution's management arrangements; the institution's general strategy and objectives; planning arrangements; policies on accounting, lending and other exposures, and bad debt and tax provisions; policies and practices on the taking and valuation of security, on the monitoring of arrears, on following up debtors in arrears, on interest rate matching, and recruitment arrangements and training to ensure that the institution has adequate numbers of experienced and skilled staff in order to carry out its various activities in a prudent manner' (Bank of England 1993: paragraph 2.31).

The criterion that business be conducted in a prudent manner relates directly to the prudent management of financial risks in order to protect financial consumers.

---

[214] Sub-paragraphs 4 (2) to 4 (8) deal with the following conditions: capital adequacy; maintenance of adequate liquidity; adequate provision for depreciation of assets and for bad and doubtful debts; maintenance of adequate accounting and other records and adequate systems of control of its business records; business conducted with integrity and skills; and minimum net assets.

Integrity and Skill

Paragraph 5 of Schedule 3 requires the business of a bank to be carried on with integrity and skill.

This criterion, like the prudent conduct criterion, concerned with the manner in which the business of the institution is carried on (which will partly determine its exposure to 'reputational risk') and is distinct from the question of whether its directors, controllers and managers are fit and proper persons, It covers two elements: whether the institution's business is carried on with integrity; and whether it is carried on with the professional skills appropriate to the nature and scale of the activities of the institutions concerned (Bank of England 1993: paragraph 2.37).

The integrity element of the criterion requires the institution to observe high ethical standards in carrying on its business. Criminal offences or other breaches of statute will obviously call into question the fulfilment of this criterion. Particularly relevant are contraventions of any provision made by or under enactments designed to protect members of the public against financial loss due to dishonesty, incompetence or malpractice.[215] Doubts may also be raised if the institution fails to comply with recognised ethical standards of conduct such as those embodied in various codes of conduct.[216]

Professional skills cover the general skills which bankers should have in conducting their business as bankers, for example, in relation to accounting, risk analysis, establishing and operating systems of internal controls, ensuring compliance with legal and supervisory requirements and in the standard of the various financial services provided to customers, The level of skills required will vary according to the individual case, depending on the nature and scale of the particular institution's activities (Bank of England 1993: paragraph 2.39).

Ownership Control

Sections 21 to 26 of the 1987 Banking Act relate to the ownership and control of UK incorporated, authorised institutions. The primary function of these sections is to protect the UK banking sector from aggressive foreign or otherwise undesirable take-overs and from the influence and control of individuals whose interests may be harmful to those of depositors.[217] Once a prospective shareholder or controller has

---

[215] Examples of such enactments are the Theft Acts of 1968 and 1978, the Consumer Credit Act 1974, the Companies Act 1985 (as amended), the Company Securities (Insider Dealing) Act 1985, the Financial Services Act 1986, the Banking Acts of 1979 and 1987 and foreign legislation dealing with similar matters.

[216] Examples of such codes would be the London Code of Conduct for the wholesale markets in Sterling, foreign exchange and bullion, the guidance notes on money laundering, the Code of Banking Practice, and the Take-over Code.

[217] The attitude of the Bank towards changes of control and ownership of UK incorporated, authorised institutions was outlined in the Banking Act Report for 1987/1988, in which the Bank made reference to a number of notable takeovers, including the TSB's acquisition of Hill Samuel; National Australia Bank's purchase of Clydesdale Bank and Northern Bank; and Equitycorp's purchase of a majority shareholding

satisfied the Bank that he is a 'fit and proper' person, the only remaining impediment to him becoming one, is the ability of the Bank to block foreign stake-building by invoking this discretionary power.[218]

Hall (1989: 111-112; 1993: 40-41) argues that the Bank is not opposed to **foreign financial institutions** taking up participations in UK banks and that these will be allowed under the following circumstances:

- the shareholder controllers and indirect controllers satisfy its 'fit and proper' test;
- the Bank is satisfied as to the nature and scope of the supervision exercised by the home authority and has received adequate assurances from the latter as to the institution's soundness;
- such moves are not designed to lead to dismemberment of the bank or group;
- the share participation does not relate to the clearing banks and probably the major merchant banks;
- developments do not reach the point where a strong and continuing British presence in the UK banking system is threatened; and
- UK institutions have, or are likely to have in the near future, reciprocal rights of action in the predator's home country.

Arguably, the first three of the above factors relate to prudential objectives, namely ensuring ability to manage financial risks, determining adequate (foreign) supervision and preserving the stability of the banking system.

However, the last three factors have a narrower UK-centric aim of preserving the sovereignty of the banking system. However, there is no explicit economic needs test as applied in some jurisdictions. This is welcomed as there is no justification for such a test from a risk-management paradigm.

As for equity participation **by foreign non-financial companies**, the Bank will take into account an additional range of factors, most notably the likely closeness of the ensuing relationship. As is the case with domestic industrial and commercial companies, the Bank will seek to avoid the creation of conflict of interest and the risks and consequences of contagion that are inherent in such moves. For these reasons, it appears that the Bank will have difficulty in granting consent for the control of a UK bank to fall into the hands of an industrial or commercial company, regardless of whether it is of foreign or domestic origin.[219]

---

in The Guinness Peat Group, including Guinness Mahon. The Bank acknowledged that such take-overs and mergers are a normal feature of a competitive market place. However, it stressed the need to assess the motives and situation of potential controllers of banks.

[218] The application of the 'fit and proper' criterion to shareholders and indirect controllers is discussed in the Bank's statement of principles (Bank of England 1993: paragraph 2.50-2.59)

[219] The ambitions of the advertising company, Saatchi & Saatchi, in respect of proposed links with Midland Bank were put to an end by the Bank, for example, in September 1987. This is in stark contrast to the approach adopted in Germany and elsewhere. The legislation may have been drafted too heavily in response to the threat of overseas predators, and as a consequence, insufficient attention may have been given to the need to protect depositors from undesireable controllers. Shareholders are tested for fitness and probity only when they pass the 15 per cent threshold. Yet, as the events leading up to TSB's

The UK regulator is therefore concerned with the possible risks emanating from the convergence of commerce and banking.

It should be noted that the provisions regulating the control of authorised institutions under the Act operate in addition to the existing provisions which are provided under the Financial Services Act 1986, by the Securities and Investments Board and by the Fair Trading Act 1973[220] and the Monopolies and Mergers Commission.

7.2.1.2 Foreign Bank Entry

Foreign banks not authorised in a member EC state

The criteria relating to fit and proper persons, prudent conduct and integrity and professional skills for institutions whose principal place of business is outside of the UK are contained under section 9 (3) which provides as follows:

> '*The banking supervisory authority in the country or territory where most of the business is conducted informs the Bank that it is satisfied with respect to the prudent management and overall financial soundness of the institution*' (Section 9 (3) (a)).
>
> '*The Bank is satisfied as to the nature and scope of the supervision exercised by that authority*' (Section 9 (3) (b)).

There is no requirement for the applicant to provide the Bank with references from the home supervisor, although the Bank encourages overseas institutions proposing to establish branches in the UK, to consult with it before making any formal approach to the Bank.

Although the Bank does place some reliance on the assurances received from overseas supervisors related to the risk-profile of the parent bank, it nevertheless examines in detail the planned business of the applicant's UK branch, its business plan, its liquidity policies, its internal controls, its accounting and other records, and staffing and management arrangements. Authorisation will not be granted if the applicant or overseas supervisor fails to allay, either through implementing an advised course of remedial action or providing suitable assurances, any doubts that the Bank may have about the fulfilment of the statutory criteria (Bank of England 1993: paragraph 4.8).

---

acquisition of Hill Samuel showed, two parties can each independently acquire just under 15 per cent, thus exercising considerable influence (or even effective control) over a bank, without being tested.

[220] The Fair Trading Act provides a tautologous definition when it deems control to exist if the acquisition or proposed acquisition of a substantial shareholding results, or would result, in of two or more authorised institutions being controlled by the same person, or group of persons, and the value of the assets taken over exceeds £30 000 000 (Fair Trading Act 1973: Section 64 (1)). The figure for the value of assets taken over was raised to £30 000 000 by the Merger References Order (1984); the acquisition may be referred by the Secretary of State for Trade and Industry to the Monopolies and Mergers Commission. In the event that such a referral is made, and the report of the Commission is adverse, the Secretary of State may order the sale or cancellation of the substantial shareholding.

The UK regulatory authorities wish to establish for themselves that branches of foreign operations are capable of managing banking risks. Consequently, foreign banks desirous of entering the UK banking system need to convince the UK supervisors that the risks managed by their parent banks are adequately supervised by their home supervisor as well as having appropriate risk-management abilities on a branch level in the UK.

A branch is regarded as an integral part of the overseas institution to which it belongs. The deposit-taking authority granted by the Bank therefore covers the institution as a whole. Thereafter, a separate authority is not required should the overseas institution decide to open more than one branch office in the UK. Furthermore, there is no requirement for the branch of an overseas institution to have its own endowment capital.

Once authorisation to a foreign bank has been granted, supervision becomes a joint responsibility of the host (i.e. the Bank) and home supervisor. The allocation of responsibilities is determined according to the principles enshrined in the Basle Concordat.

Foreign banks authorised in a member EC state

The Second Banking Directive (1989) allocates the supervisory responsibilities in respect of European banking institutions. The Bank's Statement (Bank of England 1993) contains the principles encapsulates the main standards and considerations to which the Bank has regard in exercising its duties. The Bank's powers in relation to European institutions are limited as under the Directive the competent authority in the home State has primary responsibility for the supervision of credit institutions incorporated in that State and certain of their subsidiaries. The host State authority, however, has a specific responsibility to co-operate with the home State authority in ensuring that branches of European credit institutions from that State maintain adequate liquidity in the host State. It also has responsibility to collaborate with the home State authority in ensuring that the credit institutions and their subsidiaries carrying on listed activities in the host State take sufficient steps to cover risks arising from their open positions on financial markets in the host State (Bank of England 1993: 21).

7.2.2 Permissible Business Activities

Classification as a deposit-taking institution

Like its predecessor, the 1987 Banking Act does not provide an all-embracing definition of either a 'bank' or 'banking business'. The central prohibition in both Acts focuses only on deposit-taking. Section 3 of the 1987 Act imposes an absolute prohibition on deposit-taking institutions which have not been officially authorised by

the Bank. Essentially, section 3 abolishes the distinction between recognised banks and deposit-taking institutions introduced by the previous Banking Act.[221]

Definition of a deposit

In section 5, the term 'deposit' is defined very broadly in order to prevent deposit-takers from disguising their activity in such a way as to take it outside the scope of regulation. This definition is therefore intended to further competitive neutrality across all institutions engaged in the activity of taking deposits. A deposit is defined as a sum of money paid on terms:

- under which it will be repaid, with or without interest or a premium, and either on demand or at a time or in circumstances agreed by or on behalf of the person making the payment and the person receiving it; and
- which are not referable to the provision of property or services or the giving of security.

Section 6(1) defines a deposit-taking business for the purposes of the Act as:

- if in the course of the business, money received by way of deposit is lent to others; or
- if any other activity of the business is financed, wholly or to any material extent, out of the capital of or the interest on any money received by way of a deposit.

The prohibition on deposit-taking is, therefore, wide in scope, and clearly extends beyond those institutions which might commonly be regarded as banks, in order to encompass institutions which take deposits and use those deposits (or the interest generated by deposits) to finance an activity other than lending.

Exclusion from the application of the Act

The restriction on the acceptance of deposits provided by section 3 is, however, subject to certain other restrictions which exempt certain institutions from the need to obtain authorisation. Schedule 2 covers a wide range of bank-type institutions of which it has been deemed unnecessary or inappropriate to bring within the Bank's supervisory ambit. The Schedule includes four main categories:

- building societies, friendly societies, authorised insurance companies and credit unions (which are regulated by other statutes);
- institutions that form a part of the public sector such as the National Savings Bank, local authorities, municipal banks and the Crown Agents;
- relatively small institutions which do not pose a serious risk to the public such as penny-savings banks and school banks; and

[221] However, a remnant of the two-tier system still exists in section 67 of the Act, which permits only those institutions with a paid-up equity capital of at least £5 million to use a name indicating that it is a bank or banker or carrying on a banking business.

- international or supra-national bodies including the European Atomic Energy Corporation, the International Monetary Fund, and the International Finance Corporation.

In addition, sections 4(4) and 4(5) of the Act enables the Treasury to exempt certain features from the section 3 prohibition. This flexible mechanism is generally used to grant exemptions in cases where appropriate safeguards, which protect the interests of depositors, are already in place.[222]

Of these exceptions to the Banking Act the most significant relates to building societies. Similar to banks, these institutions accept deposits from the general public and grant loans (albeit on a secured basis). Unlike banks, building societies traditionally do not engage in all the other areas of risk-management available to financial institutions. Nevertheless, the activities of building societies can be accommodated in the supervisory process applied to UK banks. The UK distinction between banks and building societies operates against the supervisory principle of competitive neutrality.

Limitations on certain activities

The UK has no statutory provisions requiring the separation of banking from commerce, securities business or insurance business. However, the Bank of England will use its powers of moral suasion to deter non-financial companies and insurance companies from acquiring a controlling interest in banks.

The UK authorities allow the full integration of **securities** activities within a bank although securities operations are usually conducted through subsidiaries. In this sense the UK banking model conforms more closely to the universal banking model prevalent in Germany. UK banks may operate freely in securities and other financial and non-financial activities provided that they agree to observe any capital and other requirements specified by the Bank of England and / or other relevant supervisory authorities (see Diagram 6.1). Additionally, assurances may be sought from large shareholders in securities operations that they accept ultimate responsibility for the liabilities thereof; and restrictions may be placed on the scope of its activities and on the nature of the transactions which can take place between the securities subsidiary and related entities. These 'firewall' requirements are seen as essential prudential safeguards (Hall 1993: 181-182).

Similarly, banks may engage freely in **insurance** activities although these need to be conducted via subsidiaries (Herring and Litan 1995: 168). There are no limits placed on investments in **property**.

---

[222] The list of exempt transactions and exempt institutions in the Regulations made under these provisions includes (Penn 1989: 39): charities; church deposit funds; industrial and provident societies; agricultural, forestry and fishing associations; retail and other co-operative societies; solicitors; deposits accepted in the course of estate agency work; certain public undertakings; Sterling debt securities; Sterling commercial paper; and authorised and exempted persons under the Financial Services Act 1986. However, not all types of deposits which may be accepted by the particular bodies are necessarily exempt.

The integration of securities and investment activities with banking allows for a holistic assessment of all the financial risks managed by UK banks.

7.2.3 Disclosure Requirements

7.2.3.1 Disclosure in Supervisory Returns

Once an institution is authorised, it remains under, and is subject to the supervision of the Bank. In order to fulfil its supervisory function, the Bank requires a flow of up-to-date and accurate prudential information and statistics which will enable the Bank to monitor the continuing compliance with the authorisation criteria. Effective supervision in a system which emphasises co-operation and participation depends heavily on the voluntary provision of financial information by the authorised institutions.[223]

These disclosure requirements are intended to ensure that the Bank of England can monitor the risk-management activities of banks.

The 1987 Act includes a number of provisions which enable the Bank to request information and documents from authorised institutions, and various connected parties, supported, if necessary, by an accountant's report. Notwithstanding these changes, much of the financial information required by the Bank to perform its supervisory function continues to be supplied by the supervised institutions on a voluntary basis. However, the Act provides for the 'voluntary system' to operate in tandem with a number of statutory powers and requirements.

Power to obtain information and documents

Section 39 (8) enables the Bank to obtain, by notice in writing, such **information** from an authorised or former authorised institution as 'the Bank may reasonably require for the performance of its functions under the Act' (Section 39 (1)). The Bank's general power to request information is given greater weight by its legal powers to compel an authorised institution to provide it with an accountant's report, containing information which the Bank has or could have required the institution to provide. This second opinion may include information which the Bank did not actually demand and gives the Bank scope to utilise the accounting as well as risk-management expertise and judgement of other parties (Section 39 (1) (b)).

Under Section 39 (3), the Bank may demand the production of specific **documents**. It may also request the institution and its past or present staff to comment upon any of the documents produced (Section 39 (5) (a)). Furthermore, even where the documents are held by a third party, the Bank has the power to require these documents to be produced (Section 39 (4)). However, the Bank's power to obtain

[223] This 'voluntary' participation was highlighted by both the Leigh-Pemberton Committee Report and the Government's White Paper on Banking Supervision. Against the background of the collapse of JMB, the White Paper proposed a tightening of the Bank's powers and procedures to ensure that all returns used for supervisory purposes are submitted promptly and have accurate information.

documents does not extend to those which are covered by legal or professional privilege (Section 39 (13)). The definition of documents is wide enough to encompass computer or other electronic records (Definitions are to be found in Section 106).

Section 39 of the Banking Act gives the Bank powers to require an institution to commission reports from accountants to establish, among other things, the adequacy of its systems and controls and the accuracy of its prudential returns. Section 39 reports are commissioned regularly as part of the Bank's routine supervision of UK-authorised institutions, and special reports may be commissioned if a specific area of concern is identified. In addition section 39 allows the Bank to require an institution, former authorised institution or other persons (for example an institution's controllers) to provide documents and other information to the Bank. During 1995/96, 647 section 39 reports were commissioned (286 of them on branches of overseas banks), including 15 special reports (Bank of England 1996(c) 37).

In practice, the UK regulatory authorities will strive to assess the risk-profile and risk-management capabilities of a bank by virtue of management interviews in addition to the section 39 disclosure requirements.

Right of entry

Should an authorised institution not comply with section 39, by failing to provide the required information, reports or documents, the Bank may exercise a right of entry to obtain the information or documents it requires.[224]

Power to appoint investigators

The Act provides the Bank with the power to appoint one or more competent persons to investigate and report to the Bank on:

- the nature, conduct or state of the institution's business; or
- the ownership or control of an institution or a former institution.

This power may be exercised where it appears to be 'desirable....in the interest of depositors or potential depositors of an authorised institution' (Section 41).

The investigator may also extend the ambit of his investigation to include group companies and other connected entities (Section 41 (3)).

All of the above rights and powers of the Bank can be utilised to obtain information related to the risk-profile and risk-management of banks.

---

[224] Strictly interpreted, section 40 (1) gives any officer, servant or agent of the Bank the right to enter any premises. The power is therefore not only exercisable when a person fails to provide the required information.

Restriction on disclosure of information

Section 86 of the Banking Act provides for the mutual exchange of information between supervisory authorities which is needed for a holistic risk-management supervisor. It may at times be disadvantageous for a bank to disclose information for reasons of client confidentiality, competitiveness or because the disclosure of a certain risk-profile may cause undesired market reaction (e.g. a run on the bank). Part V of the Banking Act provides for the confidentiality of all information, gained by means of the Act.

7.2.3.2 The Role of Auditors

Appointment and responsibility

The responsibilities of the reporting accountant[225] are set out in the Bank of England Guidance Notes, which specify the objective and scope, the extent of responsibilities to supervisory authorities, and the formal content of reports. There are few practical problems associated with the formulation of responsibilities in practice. Minor areas of doubt can be discussed informally with the Bank.

The only direct responsibilities placed on an auditor are in respect of:

- a duty to notify change of audit appointment; and
- a **statutory duty** to pass information to the supervisory authorities where it is required to protect the interest of depositors.[226]

Therefore, the duties of auditors regarding prudential controls are determined individually by means of negotiation between the respective bank and the auditor.

From a risk-management perspective a more involved participation by auditors in the UK supervisory process would be beneficial. The absence of set guidelines for auditors together with the overwhelmingly off-site methodology of the supervisory authorities could result in important risk-related information not being disclosed adequately.

Relationship with supervisory authorities

Supervisory authorities must be consulted on the appointment of the reporting accountant. The authorities must also be advised of any intention of a UK bank to

---

[225] In the UK, most of the work undertaken by internal auditors on behalf of the banking supervisors is carried out in the capacity of 'reporting accountant' under the Banking Act rather than in the capacity of internal auditor. In practice, the internal auditor and the reporting accountant are usually the same firm and the work carried out by the reporting accountant is very similar to internal audit work. There are no restrictions placed on other services which a reporting accountant can provide. When discussing the role of the external auditor this will be stated explicitly.

[226] This follows the recommendations of the 'Bingham Enquiry' into the supervision of the Bank of Credit and Commerce ('BCCI').

change its auditors or not to re-appoint existing auditors. The Bank has no formal right to object to the auditor's appointment or reappointment although informal representations may occasionally be made. The Bank can, however, veto the appointment of the reporting accountant (FEE 1993: 41). The auditor is required to inform the supervisory authorities of any irregularities or infringements he has become aware of during the course of his work, if they are sufficiently significant to prejudice depositors.

In the UK, there is a general duty of client confidentiality, but this is specifically superseded by the Banking Act to allow the auditor to communicate directly with the supervisory authorities (FEE 1993: 45).

In the UK, the auditor must inform the supervisory authorities of any intended qualification of the audit report. The audit report must be forwarded to the Bank within six months of the year-end (FEE 1993: 50).

Relationship with the bank

It is clearly stated in the Banking Act that the bank's management is responsible for financial statements and returns submitted to the supervisory authorities. The respective responsibilities of the management of the bank and the auditors are usually formally confirmed in the engagement letter (FEE 1993: 52).

The bank is made aware at the highest level of any material weaknesses noted by the auditor in a report submitted to the supervisory authorities. The bank is required to respond to the supervisory authorities by written submission, to be attached to the reporting accountant's report, which must be sent within one month of the issue of the report. There may also be further formal discussions at a trilateral meeting involving representatives of the bank, the Bank of England and the audit firms. There is no requirement for the client bank to respond to the auditor's management letter. However, the bank must respond to any report of the reporting accountant (FEE 1993: 53).

The upshot of the above is that the role of the auditor vis-à-vis the bank can be limited to traditional auditing functions and does not necessarily include an active role in risk-management, unless bank management decides otherwise. Again, a greater degree of involvement by auditors would be welcomed from a risk-management perspective.

Reporting

In the UK, the auditor is however required to report on prudential returns and elements of a bank's records and systems as selected by the supervisor. For example, the auditor could be required to give an opinion on the reliability of computer systems being a part of a records and systems review. In the case of risk assessment, the auditor could be required to review the systems for monitoring and controlling exposures, but not on the efficacy of risk positions (FEE 1993: 55-61).

A survey published by Touche Ross only days after the collapse of Barings Bank in February 1995 analysed 100 financial institutions in the UK and found evidence that the majority had inadequate risk-management systems. It found that almost 60 per cent of institutions admitted that their systems did not meet existing risk requirements and 43 per cent said that internal management reporting would require considerable investment in information technology systems (Financial Times 5 April 1995: 1). This clearly indicates that in the UK there is much scope for auditors to enhance the overall risk-management process by banks, including risk-management systems.

Supervisory authorities may request the auditor to submit a 'long form' report when a special investigation is considered necessary by the supervisory authorities. The auditor provides reports (principally exception reports) arising from his examination of records and systems and prudential returns. The areas to be covered are selected by the supervisory authorities (FEE 1993: 62) but paid for by the bank in question.

The role of external auditors

The external auditor is required to provide a special report to the supervisory authorities should he become aware of any of the following: material liquidity problems; material defects in the financial systems and controls; material inaccuracies in or omissions from any returns of a financial nature; a criminal offence; irregularities or infringements; serious shortcomings in the relationship between the bank and one or several of its customers; or any other circumstance indicating a risk of serious loss for depositors (FEE 1993: 63-64). Consequently, external auditors have a gateway to supervisors should they become aware of excessive risk-taking by a bank.

The supervisory authorities have the power to appoint a firm of accountants to undertake special investigations. This includes investigations into risk-management procedures as was carried out to determine the exact nature of the causes for the failure of Barings Bank in 1995. This can be the external auditor, the reporting accountant or external auditors. The supervisory authorities decide whether or not the extraordinary auditor's report is to be made available to the internal auditor and / or the external auditor (FEE 1993: 74).

There is no formal inspection programme by the supervisory authorities themselves, yet three-man teams make occasional limited visits (FEE 1993: 75). The external auditor has no right of access to information obtained by either the internal auditors or the supervisory authorities. However, refusal of access to internal audit information is likely to lead to a potential qualification in the audit opinion (limitation of audit scope). It is therefore unlikely that internal auditors will refuse to disclose evidence of inadequate risk-management practices or excessive risk exposure of which they have become aware. Nevertheless, a statutory duty to disclose all information related to the overall risk exposure would be preferred (FEE 1993: 77).

External auditors may make use of the work of other firms in forming their opinion on a bank's annual consolidated accounts. Usually, this would relate to the accounts of overseas subsidiaries and branches. However, external auditors remain fully

responsible to the shareholders for the opinion they give. External auditors consequently have a responsibility to ensure that the financial statements of a bank give a true reflection of its risk exposure. The extent to which external auditors rely on the work of other firms is at the discretion of the principal external auditor; approval of the supervisory authorities is not required. In the UK, in relation to work carried out as external auditor on behalf of the Bank, the position is less likely to arise since it is not normal for work carried out in this capacity to require an examination of the records of overseas subsidiaries and branches. If, for any reason, the use of other auditing firms is contemplated, there is no specific requirement to obtain the Bank's prior approval. However, in practice, it is likely that the Bank will be consulted before the work is carried out (FEE 1993: 78).

Future developments

The Report of the Board of Banking Supervision Inquiry into the circumstances of the collapse of Barings ('the Barings Report') specifically highlighted that top management and the audit committee have to ensure that significant weaknesses are resolved quickly and that the internal audit function is accorded sufficient status and has unrestricted access to top management (South African Reserve Bank 1995(a): 22).

The main intended changes are that reporting accountants may now be commissioned to form an opinion on the systems of controls over the accuracy of the information contained in an institution's records and its transfer to prudential returns; that the Bank may use section 39 reviews more flexibly, to cover group operations other than the institution itself; and that reporting accountants will be required to state the extent of the work performed for each section 39 review (Bank of England 1996(c): 26)

7.2.4 Capital Adequacy

It is of considerable importance that deposit-taking institutions maintain a level of capital that is commensurate with the nature and scale of the institution's operations, and is sufficient to safeguard the interests of its depositors and potential depositors. In determining whether such capital is adequate, Sub-paragraph (3) of Schedule 3 refers to: the nature and scale of the institution's operations; **the risks inherent in those operations**; and (where the institution is a corporate body) the operations of any other member of the same group in so far as they are capable of affecting the deposit-taking institution. Before examining how the Bank, in practice, ensures that the capital of authorised institutions is 'adequate', it is necessary to focus on the definition of 'capital' used by the Bank.

7.2.4.1 The Definition of Capital for Regulatory Purposes

Capital adequacy is defined in section 4(2) by reference to **risk-weighted assets** and is interpreted by the Bank by reference to paid-up capital and reserves, together with other financial resources available to the institution. The current UK statistical definition of capital reflects recent developments in international supervisory co-

operation. In particular it reflects the BIS proposals on the measurement of capital and assessment of capital adequacy (Bank for International Settlements 1993(b)) which were adopted in June 1989 and the modifications necessitated to comply with the EC's 'Own Funds Directive' (1989) and 'Solvency Ratio Directive' (1989) which were adopted in January 1991.[227]

The BIS proposals fundamentally changed the terminology hitherto used in defining capital. The terms primary and secondary capital were rejected in favour of the terms Tier One (core) and Tier Two (supplementary) capital. Core capital consists solely of ordinary paid-up share capital and disclosed reserves, and is included without limitations. Secondary capital however, comprising undisclosed reserves, asset revaluation reserves, general provisions, hybrid capital instruments and subordinated term debt may total a maximum of 100 per cent of Tier One capital.[228]

The new definition of capital that is applied by the Bank is contained in Appendix I.

One major change for UK banks brought about by the implementation of the BIS proposals is that the Bank will allow qualifying general provisions to be included in Tier Two capital up to a level of 1,25 per cent of weighted risk assets only. Previously, banks were allowed to include all such provisions in both the definition of the capital base and primary capital.

A key purpose of capital is to provide a stable resource to absorb any losses incurred by an institution, and thus protect the interests of its depositors and potential depositors. Capital must therefore have two main qualities to achieve this purpose fully - a capacity to absorb losses and permanence. All types of capital recognised by the Bank in Tier One have these characteristics. Tier One capital will not be of an appropriate nature if there are concerns that it may be paid away to the detriment of depositors' interests. Thus, for example, the Bank will only permit distributable reserves to be included in the capital base if the likelihood of such reserves being paid away is remote (Bank of England 1993: paragraph 2.10).

The Bank recognises that some other types of capital also provide protection to depositors on an on-going basis. In particular, certain other types of capital, while not meeting the two criteria of ability to absorb losses while allowing an institution to continue to trade and permanence, can provide protection to depositors. Some subordinated term debt is therefore eligible to be included in own funds subject to the conditions (Bank of England 1993: paragraph 2.11).

---

[227] All signatories to the BIS document were obliged to implement its proposals by the end of 1992 at the latest. See Bank of England (1992(a) and (b).

[228] Furthermore, the inclusion of subordinated term debt within the capital base is subject to a maximum of 50 per cent of Tier One capital, i.e. 25 per cent of the capital base. A further limitation applies to the inclusion of general provisions (the amount of such provisions or reserves will be limited to a maximum of 1,25 per cent of risk assets). Asset revaluation reserves in the form of latent gains on unrealised securities are subject to a discount of 55 per cent.

Provisioning

The requirement to have adequate provisions is part of the 'prudent conduct' criterion which institutions have to satisfy in order to obtain authorisation (Paragraph 4 of Schedule 1, Sub-paragraphs (7) and (8)). Banks are required to make adequate provisions for the depreciation of or diminution in the value of the assets. To this end, the Bank expects an institution to make provision for liabilities which will or are expected to be discharged and for any losses which it will or expects to incur, such as bad and doubtful debts and tax liabilities. In effect, provisions will relate to the risk that amounts cannot be recovered (Bank of England 1993: paragraph 2.23).

In examining an institution's provisions, the Bank will look at: 'its provisioning policy, including the methods and systems for monitoring the recoverability of loans (for example, the monitoring of the financial health of counterparties; their future prospects; the prospects of the markets and geographical areas in which they operate; arrears patterns and credit scoring techniques), the frequency with which provisions are reviewed, the policy and practices for the taking and valuation of security and the extent to which the valuation exceeds the balance sheet value of the secured loans' (Bank of England 1993: paragraph 2.24). The Bank expects liabilities and losses to be recognised in accordance with accepted accounting standards, as embodied in the *Statements of Standard Accounting Practice*. The Bank appreciates that subjective judgements may have to be made concerning internal systems, and is prepared to make such judgements.

Although the overall evaluation of the adequacy of provisions is subjective, some objective indicators are provided as in the case of provisions against country debt. In February 1993 the Bank issued a paper setting out a revised framework for determining the level of such provisions, which institutions could use in establishing an adequate level of provisions against country debt.

Consolidation

The Bank's supervision of banking groups is based principally on consolidated statistical returns and the annual reports and accounts of group companies. The Bank also strives to ensure that effective co-ordination between the supervisors of different companies or divisions of financial conglomerates exists.[229]

In the case of UK incorporated banks, risk analysis is undertaken both on a consolidated basis, in order to capture exposures arising in subsidiaries and other connected companies, as well as in the authorised institution, and on an unconsolidated basis, in order to assess whether there is an appropriate distribution of capital within a group.[230] For the purposes of the consolidated supervision of

---

[229] To achieve this objective, the Bank has adopted the Lead Regulator principle outlined in the Financial Services Act 1986 (See paragraph 6.2.4).

[230] The second EC Directive on the supervision of credit institutions on a consolidated basis was implemented in 1993 by the Bank's notice *Implementation in the United Kingdom of the Directive on the Consolidated Supervision of Credit Institutions* (Bank of England 1993(b)). This requires that

capital adequacy, the assets of financial companies in the group are risk-weighted and added to the total of risk-weighted assets. For the purpose of large exposures monitoring, the exposures incurred by the group companies are aggregated with those of the authorised institution and measured against group capital.

Consolidated returns covering capital adequacy and large exposures form only one source of information for the Bank's consolidated supervision, which aims to form a qualitative judgement of the strength of the overall group to which a bank belongs in order to evaluate the potential impact of the other group companies on the bank. Thus, for example, where a banking group fails to meet the trigger risk asset ratio set for it, the Bank would consider that this posed a threat to the bank so requiring it to consider whether to take action in respect of the institution (Bank of England 1993: paragraph 2.19).

7.2.4.2 Measurement of Capital Adequacy

In assessing capital adequacy, the Bank will take into account all risks of loss to which the institution may be subject, namely: credit risks; foreign exchange risks; interest rate and position risks; operational risks; contagion risks arising from subsidiaries, associates and other connected companies, which might expose the institution to direct financial loss or a general loss of confidence by association; and risks arising from the concentration of business in either a geographical or economic sector. Consequently, the Bank takes into account both an institution's on-balance sheet and off-balance sheet activities.

The minimum net asset requirement of ECU 5 million, stipulated in paragraph 4 (A) of Schedule 3, operates as a rough starting point. The Bank considers each institution individually and the results of its risk analysis, in each case, is encapsulated in the form of a minimum risk asset ratio (a 'trigger ratio'). This ratio relates an institution's capital base to the quantum of the risks identified above. The Bank will generally expect each institution to conduct its business so as to maintain its risk asset ratio at a margin above the trigger ratio. It refers to this higher ratio as the 'target ratio'.[231]

The risk asset ratio (RAR) is derived formally by expressing an institution's adjusted capital base as a percentage of its adjusted total risk assets (ATRA). The adjusted capital base for purposes of calculating the risk asset ratio is derived by subtracting from the capital base, the value of: equipment and other fixed assets (with the exception of premises); goodwill and other intangible assets; and investments in subsidiaries and associated companies as well as trade investments. The denominator is derived by determining the products of the nominal values of each distinct balance sheet component and their corresponding risk-weights, according to a classification system established by the Bank (See Appendix II).

---

consolidated supervision covers capital adequacy and large exposures, and extends to banks' parents and the financial subsidiaries of parents where the majority of the group's activities are financial in nature.

[231] Paragraph 2.12 of the Bank's Statement of Principles, (Bank of England 1988(a): Appendix I).

In considering the appropriate level for the trigger ratio, the Bank takes into account all the other risks to which a bank is exposed, its capacity to manage those risks, its profitability and general prospects. Individual trigger ratios are set for each individual institution after discussions with senior management. In this manner, capital adequacy assessment is extremely flexible, allowing supervisors the ability to accommodate differences between institutions. Although, no norms are established, the trigger ratios set for a group of similar institutions are not likely to vary considerably. Since 1992 a minimum RAR requirement of 8 per cent has to be observed by all banks active internationally. Although the Solvency Ratio Directive (1989) generally applies on a consolidated basis, the Bank continues to maintain a minimum risk asset ratio on a solo basis as well.

Because 'trigger' risk asset ratios are 'agreed' with management on an individual basis, the unique characteristics of each bank can be accommodated. The avoidance of strict limits probably represents the closest approximation of risk-based regulation as well as being conducive to the flexibility of operations.

7.2.5 Risk Assets Limits

7.2.5.1 Loan Concentration

The JMB collapse[232] highlighted the dangers of large loan concentrations as a small number of JMB's loans were significantly higher than 10 per cent of its capital base. These loans and the consequent credit risk were identified as one of the main causes of the failure of JMB. The UK Government, in its White Paper, accepted the case against absolute statutory limits and agreed that the Bank should be left with discretionary flexibility. However, it was also of the opinion that the issue of exposures to non-bank customers was of sufficient importance to justify a degree of statutory limitation (Penn 1989: 135).

The potential risk of concentrations of lending and other exposures to individual borrowers or economic sectors was emphasised in the Leigh-Pemberton Committee Report. The report made reference to the fact that many countries have imposed specific limits on large exposures to individual borrowers or groups of related borrowers but recommended against imposing such lending limits in the UK. The Report concluded that other countries' experience '...has shown that (to impose such lending limits) encourages banks to find ways around the requirement and may encourage them to trade up to the specified limit. For some institutions an exposure of even as high as 10 per cent of capital may be excessive and the supervisors need flexibility to agree upon appropriate policies with individual institutions within overall guidelines' (HMSO 1985: Chapter 5.4).

Section 38 of the Banking Act therefore imposes a requirement upon authorised institutions (other than those whose principal place of business is outside the UK) to report to the Bank any transaction or related series of transactions with 'any one person as a result of which it is exposed to the risk of incurring losses in excess of 10

[232] See paragraph 6.2.1.

per cent of its available capital resources' (Section 38 (1) (a)). Furthermore, section 38 (1) (b) requires that such an institution must report to the Bank, before entering into such a transaction or transactions, where the risk exceeds (either separately or together with previous transactions already entered into) 25 per cent of those resources.[233]

The general policy of the Bank towards large exposures entered into by authorised institutions was set out in the notice issued by the Banking Supervision Division entitled 'Large exposures undertaken by institutions authorised under the Banking Act 1987', (Bank of England 1987(b)). The most important provisions contained within this notice are summarised in Appendix III.

The Large Exposure Notice issued by the Bank clearly indicates that the Bank's approach to large credit exposures will take into account the particular characteristics of individual banks, including the nature of their business and the experience of their management. Therefore, although 10 per cent of 'available capital resources' has been generally adopted as the cut-off level for reporting purposes, for some banks the Bank may consider it prudent to set a lower percentage. It could be said, therefore, that section 38 provides for a maximum level of exposure, which may be amended during subsequent discussions with the Bank.

7.2.5.2 Country Risk

Country risk[234] refers to the risks involved in cross border lending, of which two main types can be discerned: 'Sovereign risk' and 'transfer risk'. The former is the risk that foreign governments will be unwilling to service their debts; while the latter is the risk that a government willing to repay its debt may be unable to do so due to a lack of foreign exchange necessary to service or repay its debt obligations (Hall 1993: 38-39).

The Bank's approach to country risk is set out in a publication by the Bank of England (1984(b)). While acknowledging that it is the primary responsibility of bank management to measure, assess and control country risks, the Bank will nevertheless aim to ensure that suitable risk assessment systems are in place and that adequate resources are devoted to the task; that adequate control systems for weighing the risks and controlling exposures are in place; and that these limits are appropriate and are maintained. The monitoring of statistical returns and reviewing country exposures at management interviews plays an important part in allowing the Bank to form a judgement on each bank's assessment and control procedures.

---

[233] For the purpose of Section 38, 'any one person' includes a partnership and also separate persons where these are connected in such a way that the financial soundness of any of them may affect the financial soundness of the others, or the same factors may affect the financial soundness of them all (Section 38 (2)). The 'same factors' aspect of the test includes the requirement to report the exposure to a particular economic sector. The extent to which a bank may be prudently exposed to a particular industrial sector or geographical region will vary considerably, depending on the characteristics of the bank and the sector or region concerned.

[234] The considerations applied in determining the adequacy of provisions related to country debt are covered in paragraph 7.2.4.1 above.

The regulation of the management of country risk is therefore subjective and no strict guidelines are set in this regard.

When supervising a bank's country exposures, the Bank considers how these exposures affect its assessment of the overall financial position of the bank. This means that country exposures have to be considered in relation to the adequacy of a bank's capital and provisions. In general, the larger a bank's exposure and the smaller its provisions, the higher the required risk asset ratio. As regards UK branches of foreign banks, attention is focused on the concentration of lending to its country of origin and its dependence on the wholesale market for the funding of this lending.

7.2.5.3 Interest Rate Risk

In assessing capital adequacy, the Bank also takes account of the risks arising from open interest rate positions. In the case of interest rate instruments, banks are exposed to the potential costs of replacing the cashflow arising from these instruments. This cost depends on the maturity of the contract and on the volatility of the underlying interest rates. Interest rate contracts include: single currency interest rate swaps, basis swaps, forward rate agreements and products with similar characteristics, interest rate futures, and interest rate options purchased.

The management of interest rate risk by banks is not subject to formal measurement, nor are special reporting arrangements deployed to facilitate the monitoring of interest rate risk. Ultimately, the Bank's main **objective is to ensure that each and every bank is able to identify and manage the interest rate risk to which it is exposed**. In effect the main concern of the Bank is with funding rather than with interest rate risk.[235] Nevertheless, a more formal measurement of interest rate risk would be preferred as this should enhance the overall risk-management process.

In order to calculate the **credit equivalent** amount of these instruments, a bank should add the total replacement cost (obtained by 'marking to market') of all its contracts with a positive value. An amount for potential future credit exposure which reflects the residual maturity of the contract, is then calculated as a percentage of the notional principal amount according to the following matrix (Bank of England 1987):

Term	Interest Rate Contracts
Less than 1 year	nil
1 year and over	0,5 per cent

No potential exposure is calculated for single currency interest rate basis swaps; the credit exposure on these contracts is evaluated solely on the basis of mark-to-market value. In the case of interest rate or cross currency swaps arranged at off-market prices, the Bank will require special treatment where the contract has been created in order to disguise a credit exposure to the counterparty.

---

[235] See paragraph 7.2.6 on liquidity adequacy.

7.2.5.4 Foreign Exchange Risk

In assessing exchange rate risk, the Bank takes account of all exposures arising from uncovered foreign currency positions including those resulting from the writing of options. Net positions in single currencies, including Sterling, are considered alongside the aggregate net position in all currencies. Although the Bank accepts that the primary responsibility of the control of exchange rate risk should rest with the bank's own management, it nevertheless agrees on dealing position guidelines with each bank individually, and strives to ensure that banks' internal controls are adequate to allow for effective and continuous monitoring of exposures against the guidelines. The agreed guidelines are designed to accommodate not only the business characteristics of a bank but also its relative expertise in managing foreign currency operations (Hall 1989: 97; Hall 1993: 36).

The Bank (Bank of England 1981; 1984(a)) draws a distinction between structural positions (i.e. exposures of a longer term nature) and dealing positions (i.e. those creating exposures as a result of day-to-day operations). Structural positions are excluded from consideration when dealing guidelines are formulated. However, structural exposures are dealt with within the Bank's assessment of capital adequacy, as the 'aggregate foreign currency position' in the risk asset ratio framework includes both dealing and structural positions.

Typically, UK incorporated banks active in foreign exchange operations are required to adhere to the following guidelines: a limit on the net 'open' (i.e. the difference between assets and liabilities) dealing position in any one currency of 10 per cent of the adjusted capital base, as defined for the purpose of computing a bank's risk asset ratio (see Appendix I), and a limit on the net 'short' open dealing (spot and forward) positions of all currencies taken together of 15 per cent of the adjusted capital base.

The guidelines apply to both the domestic and overseas branches of UK banks. Subsidiaries are monitored on a separate basis. Eventually, such monitoring may be used to provide a consolidated assessment of banks' foreign currency exposures for purposes of capital adequacy. In line with the revised Basle Concordat, the foreign currency operations of UK branches of overseas banks are also monitored; and guidelines, in the form of exposure limits, will be agreed upon in cases where the Bank is not satisfied with the internal controls of the branches themselves or of their head offices, or is otherwise concerned with the monitoring arrangements adopted by the bank's home supervisory authorities (Hall 1993: 36).[236]

[236] Domestic and foreign banks are required to provide monthly returns which will include the following information in contracted currency amounts: the net spot long or short position in each currency at the close of business on the reporting day; the net forward long or short position in each currency at the close of business on the reporting day; and all the occasions during the reporting period on which the agreed guidelines were exceeded (Hall 1989: 98).

7.2.5.5 Off-balance Sheet Business

The Bank follows the BIS proposals regarding the treatment of off-balance sheet activities. According to this approach, the notional principal amounts of certain off-balance sheet activities are first converted into on-balance sheet loan equivalents (the deemed credit risk equivalence) by multiplying the appropriate conversion factors. As can be seen in Appendix IV these factors vary from 10 to 100 per cent.

The loan equivalents are then factored into the basic weighting framework.[237]

7.2.6 Liquidity Adequacy

In January 1996, the Bank implemented a new system for measuring the Sterling liquidity of the large UK banks (Bank of England 1996(a): 28). The approach is based on the four key principles of prudent liquidity management, which underlie the Bank's approach to liquidity policy. They require that a bank should:

- be able to meet its obligations as and when they fall due;
- maintain sufficient immediately available cash or liquid assets to meet its obligations;
- have a profile of cash flows arising from maturing assets sufficient to fulfil its obligations ('adequate cash flow'); and
- have an adequately diversified deposit base in terms of both maturities and range of counterparties.

Most banks in the UK were supervised on what is known as the 'mismatch' approach, whereby assets and liabilities are allocated on a maturity ladder and limits are set on the size of the mismatch in various time bands. This approach is less suitable for very large banks whose balance sheets are characterised by a highly diversified retail deposit base. For these banks, it is more important that they hold an adequate stock of liquid assets.

The Bank's objective in developing the new system for Sterling stock liquidity has been to establish a framework that directly addresses the liquidity needs of the major UK retail banks and introduces a common minimum standard. It is designed to ensure that at all times a bank maintains a stock of highly liquid assets which it can mobilise quickly and discreetly to replace funding that has been withdrawn because of a perceived problem in the institution. The aim is to provide a breathing space during which the institution can try to arrange more permanent funding solutions.

The Bank has decided that, in order to provide adequate time to investigate various forms of remedial action, a bank should, as a minimum, be able to meet its obligations without any renewal of maturing wholesale funding (on a new basis) for a period of five working days, after allowing for the loss of a proportion of its retail

[237] The treatment of interest rate and foreign exchange related instruments, which is similar to the above, is discussed under paragraph 7.2.5.3 and 7.2.5.4 respectively.

deposit base. To prevent stock holdings from becoming excessively volatile, institutions will also be expected to hold sufficient Sterling stock to meet a minimum 'floor' requirement agreed with the Bank.

An institution will thus be expected to hold a stock of Sterling liquid assets sufficient to cover the higher of:

- its wholesale Sterling net outflow 'floor' over five working days, as agreed with the Bank; or
- 100 per cent of the actual wholesale Sterling net outflow over five working days, plus 5 per cent of Sterling retail deposits falling due in the same period.

The stock of Sterling liquidity comprises assets which carry a low credit risk, are traded in sizeable amounts in deep and liquid markets, and which the Bank is prepared, by convention, to lend against in the course of its money-market operations.[238]

The regulation of liquidity risk therefore relates to both normal conditions as well as providing for crisis circumstances. In the UK there are no minimum reserve asset ratios.[239] Consequently, a clear conceptual distinction is made between monetary policy and prudential requirements.

[238] These assets comprise: cash and operational balances with the Bank; UK Treasury bills and gilts; UK bank bills eligible for rediscount at the Bank; UK local authority bills eligible for rediscount at the Bank; secured overnight and callable deposits with money-market dealing counterparties of the Bank which are authorised institutions under the Banking Act; secured overnight and callable deposits with Stock Exchange Money Brokers and Gilt Edged Market Makers.

[239] See section 7.4.

7.3 Protective Regulation

7.3.1 Crisis Management

Unfortunately, prudential supervision and regulation cannot, in all instances, prevent bank failures from occurring. It is then that the question of crisis management is raised.

7.3.1.1 Emergency Liquidity Assistance

There is no legal requirement for the Bank to protect depositors or come to the aid of failing deposit-taking financial institutions; nor is there a formal statement of principles or guidelines according to which such assistance will be rendered. The clearest statement of principles that has been provided is that of Mr E. A. J. George (1993: 11-13), then Governor of the Bank):

> '*First, we will explore every option for a commercial solution before committing our own funds. Initially, we will always look to major shareholders to provide support. Short of that, we will encourage the bank to try to find a buyer, for some or all of itself, even at knock-down prices. Or a bank's major creditors may decide to provide support, to protect their own positions. Or there may be a coherent group of other banks with a common interest in an orderly resolution.*
>
> *Second, central banks are not in the business of providing public subsidy to private shareholders. If we do provide support, we will try to structure it so that any losses fall first on the shareholders and any benefits come first to us. And any support we provide will be on terms that are as penal as we can make them without precipitating the collapse we are trying to avoid.*
>
> *Third, we aim to provide liquidity; we will not, in normal circumstances, support a bank that we know at the time to be insolvent. Our own capital is not there to be used as risk capital. But it would be wrong to conclude from this that loans or guarantees never involve any risk. Even if a bank is apparently solvent at the time we provide support, it can easily become insolvent later.*
>
> *Fourth, we look for a clear exit. The company may be required to run down or restructure its operations, under our surveillance, to the point where it can do without our support within a given period. Making the terms of our support as unattractive as possible has the great advantage of encouraging this process. Alternatively the company may be wound down under our management - which is what happened to JMB, and earlier to Slater Walker and many of the lifeboat banks. We aim to protect the system, not to keep in being unviable banking capacity and so interfere in the market process unnecessarily.*
>
> *Fifth, we usually try to keep the fact that we are providing systematic support secret at the time. In principle, I am against secrecy for the sake of it. And in*

this field there can certainly be circumstances where the markets will be reassured by knowing that we are involved. Very often, however, the opposite is true. If people know that we are so concerned about systematic fragility that we have judged it necessary to provide support, that could lead to a wider loss of confidence. They would wonder how far that support would be extended, and we could rapidly find ourselves in the position where we were in practice underwriting all the liabilities of the banking system. It could then be extremely difficult for us to disengage. We will as a matter of public accountability always reveal the fact of our support after the event, when the danger has passed. Even then, it will often be difficult to disclose publicly the details of our support. The full details could weaken even those banks that had succeeded in dispensing with our support.'

The overriding principle is therefore that central bank support, whatever form it takes, is directed to safeguarding the financial system (and therefore preventing damage to the wider economy), not the institution itself. This entails looking after the interests of depositors in the first instance rather than shareholders. It is also noteworthy that the Bank espouses a discretionary doctrine, i.e. it retains absolute discretion on whether a bank should be supported or not. Beyond that, there are various rules that are applied, as described above.

7.3.1.2 Corrective Action

Apart from its traditional rediscount and emergency assistance facilities, the Bank has, in the past, called upon the banking community (and especially the major UK clearing banks) to limit any risk of contagion. The Bank prefers the formation of 'lifeboats', whereby the major banks, creditors and the Bank itself contribute to a fund which can then be used to rescue the ailing yet fundamentally sound institutions. Support has not yet been extended beyond the banking sector, although Hall (1993: 39) argues that a serious crisis in some of the other sectors of the financial services industry, such as the securities, insurance or building society sectors is likely to necessitate such a shift in policy because of the substantial systemic risks associated with the financial operations conducted in such markets. The emergence of financial conglomerates has increased the problems that the bank faces in this regard.[240] This is an important point which may also lead to a change in prudential supervisory policy in other financial systems.

7.3.2 Deposit Insurance

Whilst the aim of prudential regulation is to minimise the occurrence of bank failures, the existence of the UK deposit protection scheme (the 'scheme') is a pragmatic acknowledgement that deposit-taking institutions will continue to fail and that disadvantaged depositors should be compensated. The scheme was inaugurated by the 1979 Banking Act which adopted a standing fund, contributed to by the

[240] The most recent example of such a bailout was the rescue of Johnson Matthey Bankers in 1984. In the early 1970s, a more extensive lifeboat support operation was mounted to stem the loss of confidence associated with the secondary banking crisis (see paragraph 6.2.1).

institutions authorised under the Act and administered by the Deposit Protection Board (the 'board'),[241] with scope for further contributions should they become necessary. Protection under the 1979 Act was effectively limited to £7 500 per depositor per institution to reflect the sentiment that even small depositors must take some responsibility for assessing the credit worthiness of the institution in which they place their deposits.

The 1987 Banking Act, which in a number of other areas of banking supervision has materially changed what was envisaged by its 1979 predecessor, left the Scheme largely unchanged, but for some technical amendments and the fact that the scope of protection was effectively doubled. It seems that the legislature of the 1987 Banking Act was happy to allow the deposit protection scheme to continue largely as it was; efficient, effective, uncontroversial and probably unknown to the majority of depositors.

The quantum of protection

The Credit Institutions (Protection of Depositors) Regulations 1995 came into effect on 1 July 1995. The Regulations amended the Scheme to meet the requirements of the EU Deposit Guarantee Schemes Directive. They made a number of changes to the level and scope of the protection provided: in particular, the maximum level of protection for an individual depositor was increased from 75 per cent of £20,000 to 90 per cent of £20,000 (or ECU 22,222 if higher).[242]

The Scheme now covers deposits in ECU and the currencies of EEC states (rather than just Sterling deposits), and covers the branches of UK-incorporated banks throughout the EEC where coverage was previously limited to their UK offices (Bank of England 1996: 29). Banks are now required to provide depositors with details of deposit protection arrangements.

Interestingly, corporate deposits still generally remain protected and there has been no attempt to restrict protection to the individual depositor. Consequently, the ambit of the scheme is wide in that all depositors regardless of their degree of financial sophistication are covered. On the other hand the quantum of protection is limited and gives little comfort for large corporate depositors. The UK scheme consequently does not protect large depositors who have deposited money in high risk banks. It is assumed that such depositors will have the sophistication to assess the risk-profile of

---

[241] Schedule 4 to the 1987 Banking Act sets out the constitution of the board and the administrative regulations which govern it. The board consists of three ex-officio members namely the Governor of the Bank (acting as chairman), the deputy governor of the Bank and the Chief Cashier of the Bank. In addition, there must be a number of ordinary members appointed from time to time by the Governor. Three of the ordinary members must be directors, controllers or managers of contributory institutions and the remainder are Bank employees. The Board must keep proper accounts, audited by a recognised body of accountants and must, as soon as practicable after the end of a financial year, prepare an annual report on the performance of its functions during that year. In practice, the Board meets approximately twice a year, with the day-to-day administration delegated to a secretary who is an employee of the Bank.

[242] These changes also brought the Scheme into line with the Building Societies' Investor Protection Scheme.

banks. The Act maintains the board's general discretion to withhold payment to anyone who, in its opinion, was responsible for, or may have profited directly or indirectly, from the circumstances giving rise to the institution's financial difficulties (Section 58 (5)).

Procedure and Assessment

The Scheme is administered by the Deposit Protection Board, whose function is to maintain and distribute the Deposit Protection Fund. Established as a body corporate under section 21 of the 1979 Banking Act; section 50 of the 1987 Act provides for the continued existence of the board and sets out its duties in respect of the fund.[243] In short, it is concerned with damage limitation after the event rather than damage prevention by assessing or influencing the risks taken by banks.

Contributions to the Fund

The institutions which must contribute to the Deposit Protection Fund and the machinery for the collection of such contributions are set out in sections 52 to 56 of the Act. The first and most fundamental point to note is that all institutions which are authorised under the Act are required to contribute to the fund. Building Societies are not covered by the scheme, which operates against competitive neutrality for all deposit-taking institutions although a separate scheme for the protection of building societies' depositors exists. Contributions to the fund consist of three types; initial, further or special contributions.

Initial Contributions

Initial contributions, as the name implies, are one-off payments by institutions levied by the Board as soon as they become contributory institutions. The amount of this contribution is subject to a minimum and maximum amount under section 56. The minimum initial contribution is £10 000 whilst the maximum contribution is £300 000. Subject to these parameters, the Board is given a wide discretion to levy such contribution as it considers appropriate to put the institution on a basis of equality with other contributory institutions.[244] Under section 53 (4) the board may waive an initial contribution if the institution is to carry on 'substantially the same business' as that carried on by a previous institution. This would appear to apply to the case of mergers between contributors.

---

[243] These are limited to holding, managing and applying the fund according to the Act and levying contributions from the authorised institutions. It should be recognised that the foregoing provides the limits of the role of the board within the supervisory structure; it is not a body that deals with complaints or disputes, nor can it initiate or assist in rescue operations.

[244] In most cases, this discretion is entirely theoretical, since the contribution is levied with reference to the deposit base and most newly authorised institutions do not have a deposit base. Such institutions simply pay the statutory minimum of £10 000.

Further Contributions

Further contributions are dealt with in section 54, and are levied from contributory institutions in two different circumstances. First, if, at the end of a financial year the fund contains less than £3 million, further contributions may be required by the Board to restore it to its original value of between £5 million and £6 million. Second, contributions may be levied in the event that the Treasury takes a policy decision to increase the amount of the fund beyond £5 million to £6 million and need to levy further contributions to enable the new figure to be attained. Such a levy can only be made by an order, approved by both houses of parliament (Section 54 (2)).

Special Contributions

Special contributions are provided for by section 55. These enable the board to levy contributions if, during the course of any financial year, it appears that payments are likely to exhaust the fund.[245]

Clearly, none of the contributions made to the fund are directly related to the risk-profile of a bank or the risk that the deposits may not be repaid. Furthermore, the contributions do not even take into account the actual total deposits covered at a given bank (i.e. when the individual limit of £18 000 is applied). There is therefore a high degree of moral hazard attached to the UK deposit insurance system. It is recommended that the contributions should rather relate to the total amounts of deposits covered for each bank as well as the risk of default attached to these.

Activation of the Scheme

Section 58 states that if an authorised institution becomes insolvent or is the subject of an administration order under section 8 of the Insolvency Act of 1986, the board must, as soon as is practicable, pay out to each protected depositor 90 per cent of his protected deposit. Deposits made after the institution ceased to be authorised are not protected unless the relevant depositor did not know and could not reasonably be expected to have known that the institution was no longer authorised.[246]

---

[245] Once the board has determined how much it would like to charge contributors, it will serve a notice on the relevant institutions, specifying the amount due and requesting payment within 21 days. As all contributions are levied on the basis of a percentage of an institution's deposit base, it is clear that the term 'deposit base' must be defined adequately. The definition of deposit base is contained in section 52 (4). The deposit base includes loans made to an institution by other institutions and loans made in the course of a lending business other than by the Bank and authorised institutions. It does not include non-Sterling deposits, deposits with an original term to maturity of more than five years, deposits from connected persons (as discussed above) and secured deposits. Significantly, deposits over £20 000 are also covered by the definition, even though these are not protected under the scheme.

[246] An interesting innovation in the 1987 Banking Act is the provision in sections 58 (3) and (4) for dealing with situations where there is an overlap between protection afforded under the deposit protection scheme and protection under other comparable schemes. Where the board is satisfied that comparable protection is available, it has a choice: it may deduct from its payment to the depositor any sum due under the comparable scheme or it may arrange with the authority responsible for the comparable scheme that the board will pay in full and then recoup an agreed sum from that authority.

Once the Board has made a payment to a depositor, the scheme aims to put the Board in the shoes of the depositor vis-à-vis the institution and so the institution is treated as being directly liable to the board for an amount equal to the payment (less any sum recouped from a comparable scheme, as discussed above). Clearly, the hope is that as a result of section 62, the Board, having paid out sums to depositors, may subsequently recoup a substantial portion of these monies from the institution. It is only at this stage that the Board will concern itself with the circumstances and hence risk-profile of a particular bank.

General

Hall (1993: 44) argues that the Scheme should be redesigned to reduce the degree of co-insurance required from a depositor and to index the basic level of protection. More importantly, Hall (1993: 44) also supports the view expressed here in favour of risk-related premiums.

7.4 Monetary Requirements

The programme of monetary deregulation and re-regulation in the UK since 1971 is chronologically depicted in Table 7.1.

Table 7.1 Monetary Deregulation in the UK

Date effective	Reform measure
October 1971	Under the Competition and Credit Control approach to monetary policy the following reforms were implemented: • the interest rate cartel of the clearing banks was abolished; • the 8 per cent cash ratio and the 28 per cent minimum liquid assets ratio (both imposed only on clearing banks), were replaced by a 12,5 per cent minimum reserve assets ratio on clearing banks, secondary banks and large finance houses; • a 1,5 per cent minimum cash ratio was imposed on the clearing banks; • lending ceilings were abolished; and • hire purchase terms control were abolished.
October 1972	The Bank rate, the traditional rediscount rate of the Bank of England, was replaced by a market-determined minimum lending rate (MLR).
September 1973	An interest rate ceiling of 9,5 per cent was imposed on the amount that banks could pay on Sterling deposits of less than £10.000.
December 1973	Hire-purchase terms control was reintroduced; and a supplementary special deposit scheme, known as the 'corset', was introduced.
February 1975	The 9,5 per cent interest rate ceiling and the corset were abolished.
November 1976	The corset was reimposed.
August 1977	The corset was abolished once again.
May 1978	MLR set by administrative decision rather than using the market-related formula.
June 1978	The corset was re-imposed again.
October 1979	Exchange control was abolished.
June 1980	The corset was finally abolished.
August 1981	A new monetary control regime was established under which: • the minimum cash ratio and minimum reserve assets ratios were abolished; • MLR was suspended; • a 0,5 per cent of 'eligible liabilities' non-operational cash ratio requirement was imposed on all monetary sector institutions with liabilities averaging at least £10 million over a selected period.
July 1982	Hire-purchase terms control was finally abolished.
Source:	*Hall 1993: 29-30.*

Since July 1982 banks in the UK have not been subject to any direct monetary requirements. The only balance sheet ratios imposed on banks for monetary purposes is the 'eligible liabilities' cash ratio. The ratio, which is currently at the level of 0,4 per cent can be regarded as an implicit tax on the banking sector.

Monetary policy objectives are pursued purely through open market transactions. The ability of the Bank to conduct monetary policy without prescribing a reserve asset ratio is retained by means of the balances held voluntarily by the clearing banks at the Bank. Furthermore, monetary policy is facilitated by the convention requiring the clearing banks to inform the Bank, on a daily basis, of their intended clearing balances. This enables the Bank to determine the desired level and structure of short-term interest rates in a predictable fashion (Hall 1993: 31).

The avoidance of direct monetary requirements by regulatory authorities reflects an acknowledgement of the costs (in terms of competitive distortions created, resources misallocated etc.) associated with the use of these methods.

7.5 Summary and Conclusion

Table 7.2 below summarises how the various components discussed in this Chapter are related to the risk-management activities of UK banks.

Table 7.2 Prudential Regulation of Banks in the UK

Component	Risk consideration
Licensing and ownership control	• Management fit and proper to manage banking risks • Initial capital of only ECU 5 million required therefore relatively low barrier to entry
Foreign bank entry	• Ensuring home supervisor adequately supervises bank's risk as well as own investigation into risk-management by branch
Permissible business activities	• Broad definition of deposit to ensure supervision of all banking institutions engaged in risk-management with the main exception being building societies • Securities and insurance activities allowed, provided these risks are supervised by a relevant authority
Disclosure requirements	• Voluntary system to supply risk information operates in addition to statutory powers to obtain documents and information relevant to risk-management • Auditors required to supply authorities with risk information
Role of auditors	• Bank management may decide on the involvement of internal auditors in the risk-management process • Auditors required to report on prudential returns and risk-management systems, however involvement in risk-management process is limited unless required by bank management
Capital adequacy	• Capital adequacy determined with reference to the risk-weighted assets of a bank • Consolidation required to provide overall perspective on risk-profile of all operations of a banking group • Measurement of capital adequacy takes into account all banking risks by means of an informal 'target ratio' and a formal 'risk asset ratio'
Risk asset limits	• Credit risk regulated by limiting large exposures to 10 per cent or less of available capital • Country risk-related to overall financial position of bank but without set guidelines • Interest rate risk not formally measured or reported, but each bank required to identify and manage interest rate risk • Foreign exchange risk regulated by agreeing on dealing position guidelines and incorporating structural positions in capital adequacy assessment • Off-balance sheet risks incorporated into overall risk assessment.
Liquidity adequacy	• Liquidity maturity mismatch monitored for normal trading conditions supplemented by a liquidity stock requirement for crises

Although the 1987 Banking Act and the regulations thereto have further formalised the supervisory process in the UK, the informal supervisory style of the Bank has been retained in may respects. The Act requires banks to be authorised, it regulates the ownership and activities of banks, imposes disclosure requirements and lays

down guidelines for capital adequacy in accordance with BIS directives. Yet it is clear that the Act still allows for considerable flexibility within which the supervisory authorities are able to monitor banks and banking activities.

The Bank has assessed the capital adequacy of UK incorporated banks on a risk basis since 1980. The Bank is unique in not employing strict gearing ratios, although it observes the minimum BIS standards. It also exhibits great flexibility to take account of all risk exposures and to set requirements individually.

Significantly, each of the banking risks identified at the outset of the dissertation are supervised in the UK, adding weight to the argument that this is and indeed should be the prime concern of regulators of deposit-taking institutions.

The discretionary powers afforded to the Bank are also apparent in the Bank's approach to emergency assistance, with the emphasis placed on the stability of the financial system as a whole. This lends support to the reasoning that financial stability is the prime regulatory objective in the case of banks, a point further underpinned by the existence of a comprehensive deposit protection scheme.

However, the UK deposit insurance scheme has moral hazard deficiencies as it does not rely on risk-related insurance premiums. A summary of the risk considerations underlying the UK system of protective regulation is provided in Table 7.3.

Table 7.3 Protective Regulation in the UK

Component	Risk consideration
Emergency liquidity assistance	• No legal duty to protect depositors • Bank of England will provide assistance if the failure of a bank poses a risk to the stability of the banking and / or financial system
Corrective action	• Risk of contagion countered by formation of lifeboats
Deposit insurance	• Compulsory • Protection of smaller depositors against risk of bank failure with effective limit of £18 000 • Insurance contributions not related to risks of deposits with each bank, thereby increasing moral hazard

Finally, the freedom from direct monetary regulation enjoyed by banks in the UK, reflects an awareness by the Bank of England of the costs inherent in these restrictions.

Consequently, the various components of UK Banking Supervision discussed in this Chapter demonstrate adherence to the research problem which states that banking regulation is concerned with the risk-management activities of banks.

CHAPTER 8

THE REGULATION OF DEPOSIT-TAKING INSTITUTIONS IN GERMANY

8.1 Introduction

This is the second of three country-specific Chapters; covering banking regulation in Germany. The framework of this Chapter conforms to the framework for practical regulatory analysis as constructed in Chapter 4 and applied also to the UK and South Africa. The three broad areas discussed are those relating to prudential regulation, protective regulation and monetary requirements.

Prudential or *preventative* regulations seek to directly influence the various risks assumed and managed by financial institutions whereas *protective* regulations offer protection to depositors or to deposit-taking institutions themselves. *Monetary requirements* are usually instituted with the aim of supporting monetary stability but there is little regulatory justification for these requirements.

This Chapter will demonstrate the manner in which the German regulatory framework facilitates the management of various financial risks attached to banking activity. In doing so it will be proven that the regulation of deposit-taking institutions in the German financial system accords with the research problem of this study, namely that regulatory frameworks reflect the realities of financial risk-management.

As was discussed in paragraph 6.3.2 and as will become increasingly evident below, the German approach to banking regulation is formal and narrowly rule-based. Consequently, the components of regulation are often complex and detailed to the extent that the primary focus on risk-management rather than the adherence to strict rules may become diffused. Similarly, the German regulatory methodology which is characterised by off-site gathering of relevant information and infrequent interaction with bank management does not explicitly indicate a regulatory aim of risk control. Nevertheless, all the components below are routed in risk-management activities of banks.

8.2 Prudential Regulation

8.2.1 Entry Requirements

8.2.1.1 Licensing and Ownership Control

Any enterprise falling within the definition of 'banking institution' as defined[247] in section 1(1) of the Banking Act[248] and which is not specifically exempted from the provisions of the Act must obtain a banking licence from the FBSO prior to the commencement of operations (Section 32(1)).

A banking licence is likewise required for any foreign enterprise conducting the business of a 'banking institution' through a branch in Germany.

The FBSO may grant the licence subject to the applicant's fulfilment of specified conditions or may limit the licence to certain types of banking business (Section 32(2)) within the meaning of section 1(1) of the Banking Act. Prior to the issuance of a licence permitting the conduct of deposit-taking business, the FBSO must consult the appropriate banking association. In the case of private commercial banks, the FBSO will normally subject the licence, insofar as it allows the business of deposit-taking, to the condition that the applicant bank becomes a member of the Deposit Protection Fund.[249] This evidences the German regulatory concern with the protection of depositors.

Pursuant to section 33 of the Banking Act, a banking licence for German incorporated banks may only be refused by the FBSO if: adequate capital necessary for the operations is not available; the bank does not appoint at least two managers *(Geschäftsleiter)*; the managers are not 'reliable' *(zuverlässig)*; the managers are not 'professionally qualified' *(fachlich geeignet)* to direct the affairs of the bank; or the application for the licence is not accompanied by a business plan.

The issue of banking licences is thus not simply at the FBSO's discretion. On fulfilment of the aforementioned five requirements, a legal right to the licence, which can be enforced in court, is established.

As was the case in the UK where a 'fit and prudent' criterion is applied to screen prospective bank management, the German requirements relating to reliability and professional qualifications can be traced to the ability to manage banking risks.

---

[247] See paragraph 8.2.2.

[248] The most recent amendment of the 1985 Banking Act was the Law for the Amendment of the Banking Law and of Other Provisions Relating to Banks *(Gesetz zur Änderung des Gesetzes über das Kreditwesen und anderer Vorschriften über Kreditinstitute)* (1993). This Chapter contains numerous references to the 1985 German Banking Act, as amended. For ease of reference, the word 'section' should therefore, for purposes of this Chapter, be regarded as pertaining specifically to this Act, except where expressly indicated otherwise.

[249] See paragraph 8.3.2 below.

Likewise, the minimum capital required is intended to cushion depositors should banks engage in excessive risk taking.

The initial minimum capital of banking institutions is not fixed by statute or regulation, but may be set from time to time by the FBSO as a matter of administrative practice. The **initial minimum capital required** by the FBSO for private commercial banks has been **DM 6 million** for some years. Once a bank is in operation, Principle I of the 'Principles Concerning the Equity Capital and Liquidity of Banking Institutions' issued by the FBSO, which lays down the required ratios between credits extended by a bank and its equity capital, effectively determines the necessary minimum capital.[250]

The managers need not be German citizens but they must be resident in Germany and must, according to the administrative practice of the FBSO, be fully conversant with the German language. The 'professional qualification' (Section 33(1) No. 3) requirement of a manager is normally deemed to be fulfilled if he has served for at least three years in an executive position with a bank of comparable size engaged in a comparable type of business prior to his appointment (Section 33(2)). As the business of banking entails managing financial risks, the latter requirement relates to the extent and nature of risks in which the manager wil have management experience.

The term 'business plan' *(Geschäftsplan)* means a detailed description of the kind of business which the bank wishes to carry out and of the proposed organisational structure of the bank. This enables regulatory authorities to assess both the viability and risk of the banking venture.

A banking licence expires automatically if banking operations are not commenced within one year after issue (Section 35(1)). The FBSO may revoke the licence only under specified circumstances, namely, if banking operations have been discontinued for a period of one year (Section 35(2)), if the bank ceases to have at least two managers (Section 35(2)), if the bank's managers are not 'professionally qualified' or 'reliable' (Section 35(2)), or if the fulfilment of the bank's obligations to its creditors, in particular the security of the assets entrusted to the bank, is endangered.[251] As all of the foregoing will be the result of or evidenced by inappropriate risk exposures it follows that the revocation a banking licence is dependant on proper risk-management. In the case of the expiration or revocation of the licence, the FBSO may order that the bank be wound up (Section 38).

Ownership Control

As far as the ownership of a bank is concerned, German banking law, prior to the 1993 Amendments to the Banking Act, did not limit ownership to certain kinds of investors or to certain percentages, nor did it require reports about the owners.

---

[250] See paragraph 8.2.4.2 below.

[251] The 'endangerment' of the security of such assets is presumed to exist in the event of a loss of 50 per cent of the bank's equity capital or loss of more than 10 per cent of the bank's equity capital in each of the three preceding consecutive business years (Section 35(2)).

Industrial and commercial companies could own banks, and in some cases the FBSO, and even the bank itself, did not know the identity of the owners.

The 1993 Amendments, which also incorporated the rules of the Second Banking Directive (1989) on shareholdings in banks, brought about a change in this regard. The new section 2(b) of the Banking Act provides that a person who intends to make a significant investment (10 per cent or more) in a bank must promptly inform the FBSO and the Bundesbank. The notice must contain information demonstrating the reliability of the investor and its officers.

The owner of a significant investment must also report to the FBSO and the Bundesbank any proposed increase of a significant investment that would result in the investment reaching or passing the threshold of 20 per cent, 33 per cent or 50 per cent of voting rights or capital of the bank, or would result in the bank becoming such investor's subsidiary.[252] These changes to ownership requirements indicate a greater awareness by German supervisors of the potential risk attached to a bank having a too dominant shareholder.[253]

The 1993 Amendments to the Banking Act therefore ensure that the identity of the owner of a significant investment in a bank will be known to the German banking authorities and that the ability of shareholders to influence the bank management as regards the risks in which they engage is supervised; however, it does not change the principle that industrial and commercial companies may invest in or own banks.

8.2.1.2 Foreign Bank Entry

Foreign banks not authorised in a member EEC state

A branch of a foreign bank not authorised in a member EEC state that is carrying on 'banking business' in Germany within the meaning of section 1(1) of the Banking Act is deemed, for purposes of the application of the Banking Act, to be a 'banking institution' (Section 53(1)). Consequently, all provisions of the Banking Act apply *mutatis mutandis* to such branch, subject however, to certain modifications as

---

[252] The 1993 Amendments to the Banking Act hold 'subsidiary' as an enterprise that is a subsidiary as defined in section 290 of the Commercial Code (*Handelsgesetzbuch* (HGB 1970)). Section 290 of the HGB defines the subsidiary of a parent as a company in which the parent has the majority of votes, or as to which the parent has the right to elect or dismiss the majority of the members of the administrative or supervisory board or as to which the parent has the right to exercise a controlling influence on the basis of an agreement with the subsidiary *(Beherrschungsvertrag)* or on the basis of a provision in the charter of the subsidiary (HGB 1970: section 290(2)).

[253] The FBSO can revoke the investment within three months if it is not satisfied with the reliability of the investor or its officers (Section 2(b) and 33(1)), or if an effective supervision of the bank is not possible on account of the investment or the relationship of the investor with other enterprises (Section 33(1)). Likewise, any shareholder owning a significant investment in a bank who intends to dispose of that investment, or to reduce it below the benchmarks of 20 per cent, 33 per cent, or 50 per cent measured by voting rights or capital, or to reduce the investment below the subsidiary level must inform the FBSO and the Bundesbank (Section 2(b)).

provided in section 53.[254] The absence of a legal distinction between foreign and German banks signifies the degree of cross-border competitive neutrality which is a facet of the modern German banking system.

Thus, prior to the commencement of the operations of the branch, a banking licence must be obtained. The requirements to be met in order to obtain the licence correspond to those which must be fulfilled by German incorporated banks.

The foreign bank must appoint at least two persons who are authorised to manage the business of the branch and to represent the foreign bank. Such persons are deemed to be managers *(Geschäftsleiter)* (Section 53(2)) which means that all provisions of the Banking Act relating to the managers of German banks are also applicable. The managers must therefore fulfil the personal and professional qualifications described above for managers of German banks. At least one of them must have served for at least three years in an executive position with a bank in Germany, which may be a German branch of a foreign bank, of comparable size engaged in a comparable type of business prior to his appointment. For the other managers it generally suffices if they have served in such a position with a bank abroad, but in any event they are required to have had not less than one year of banking experience in Germany.

Similar to the regulation of German banks, the managerial qualifications and minimum capital required for foreign banks have their roots in prudential considerations relating to the managerial ability and capital base to assume banking risks.

Furthermore, the minimum initial capitalisation requirements applicable to German private commercial banks pertain in the form that the foreign bank must supply the branch with the appropriate amount of initial capital.

The foreign branch must be registered and the managers thereof entered in the Commercial Register. The FBSO will normally subject the licence to the conditions that the branch must, prior to commencement of operations, be registered as a branch in the Commercial Register and that deposit-taking business with non-banks may only be commenced after the branch has become a member of the Deposit Protection Fund.[255]

Foreign banks authorised in another EEC state

The 1993 Amendments to the Banking Act implemented the 'European passport' concept of the Second Banking Directive (1989) which provided that banking institutions authorised in another EEC member state were entitled to offer their services freely to individuals and businesses in Germany and to establish branches

[254] If a foreign bank maintains several branches in Germany, all such branches together are deemed, for banking regulatory purposes, to constitute a single 'banking institution' (Section 53(1)).
[255] See paragraph 8.3.2 below.

in Germany without the need for any further authorisation.[256] Each member state must ensure that at least the activities listed in the Annex of the Directive may be pursued in its territory by any banking institution authorised and supervised by its EEC home member state (Baums and Gruson 1993: 116). The effect of the European Passport concept is that each European supervisory authority will rely on the ability of each of the other European regulators to adequately supervise the risk of Pan-European banks.

8.2.2 Permissible Business Activities

Permitted activities

The universal banking system in Germany allows banks to offer a variety of financial services to their customers, such as the acceptance of deposits, consumer and commercial lending, securities underwriting and trading, mutual fund operations, and investment advising. Section 1(1) of the Banking Act enumerates certain activities and provides that any enterprise engaging in one or more of such activities on a commercialised scale is a banking institution and is subject to the licensing requirements and other provisions of the Banking Act. Thus, the purpose of section 1 of the Banking Act is not to limit activities that are permissible to banks, but to establish that a banking licence is required for certain activities.

Section 1 of the Banking Act does not include certain activities that are frequently conducted by German banks, and licensed banks may also engage in activities that are not specifically contained in section 1.[257] Some non-listed activities are underwriting, factoring, forfaiting, financial leasing, dealing in precious metals and collectors' coins, and dealing in foreign exchange. Banks may also engage in securities business and may even act as real estate brokers.

Section (1)1 of the Banking Act specifies nine types of transactions as 'banking business'.[258]

'Deposit business' is defined as the acceptance of monies from others as deposits, irrespective of whether interest is paid thereon. Curiously, the term 'deposit' and its distinction from other funds received (such as loans, advances, repayments), the acceptance of which does not constitute 'banking business', is not defined in the Act. For purposes of bank supervision, particularly for determining whether or not an enterprise is engaged in 'deposit business', the FBSO has adopted a definition in its administrative practice which has also been accepted by the courts. According to this

---

[256] The 1993 Amendments assume that the activities listed in Section 1 are identical with, or at least not more limiting than, the activities listed in the Annex to the Second Banking Directive. The Annex defines the scope of the principle of mutual recognition of the banking licences of other EEC member states.

[257] The commencement and termination of activities not enumerated in section 1, must, however, be reported to the FBSO.

[258] Under section 1(1), the Federal Minister of Finance is authorised to issue regulations designating transactions other than those listed in section 1(1) of the Act, as banking business. However, this power has up to now never been exercised.

definition, 'deposit business' constitutes 'the continuous acceptance of monies from a multitude of persons who are not banking institutions on the basis of standardised contracts in the form of loans or irregular deposits[259] without the provision of security of a kind customary in banking and without concluding a written agreement in each individual case (BGB 1968: section 700).

Although the definition of a deposit is ambiguous, the definition of deposit-taking activity is sufficiently broad to encompass all manner of banking activity and financial institutions. The German supervisory net is therefore cast very wide.

'Credit business' comprises the extension of loans and acceptance credits.[260]

'Discount business' is defined as the purchase of bills of exchange, promissory notes and cheques.[261]

'Securities business' is defined as the purchase and sale of securities for the account of others, i.e. securities broking. The purchase and sale of securities for a bank's own account does not constitute traditional banking business yet **this does not preclude banks from engaging in securities trading for their own account**. According to the definition, it is irrelevant whether the securities are purchased or sold in the name of the banking institution or in the name of its customers. As a rule, German banks purchase and sell securities on behalf of their customers in their own name, usually as agents earning commission, but in certain cases also as principal. The management and underwriting of securities issues do not constitute banking business within the meaning of section1(1) and is as such not subject to any special banking regulatory provisions.[262]

'Custody business' comprises the custody and administration of securities for the account of others (Section 1(1) No. 5).[263]

---

[259] Although the inclusion of the word 'deposit' in the definition is in the opinion of the writer clearly circuitous.

[260] Only the extension of loans, not the acquisition of existing money debts, constitutes 'credit business', so as to exclude in particular factoring and forfeiting from the definition of banking business. However, for purposes of financial reporting by banking institutions, section 19(1) No. 1 provides that the term 'credit' includes money debts acquired for consideration, which transactions are accordingly subject to bank regulation if carried on by a 'banking institution'.

[261] The discounting of such paper constitutes, in terms of private law, not a credit transaction, but a purchase contract. The purchase of securities other than bills, notes and cheques or of book receivables does not constitute discount business.

[262] In terms of the current policy of the Bundesbank, the lead management of DM denominated bond issues of foreign issuers may be carried out only by banks incorporated in Germany (so as to exclude German branches of foreign banks). This regulation does not conform to the requirements of competitive neutrality between foreign and local banks.

[263] Bank custody operations occasionally take the form of separate deposits *(Sonderverwahrung)*, but more commonly that of collective deposits *(Sammelverwahrung)*, whereby the custodian bank may either keep the customer's securities itself or entrust them to a sub-custodian bank *(Drittverwahrung)*, such sub-custodian generally being a securities clearing bank. The administration of securities includes primarily detaching and collection of maturing coupons, procuring of new sheets of coupons, attending to drawings and notices of repayment and liquidation of maturing securities. The securities as well as the custody business are regulated by the provisions of the Act Concerning the Custody and

Section 1(1) No. 7 designates a further aspect of banking business as the 'incurring of obligations to acquire claims in respect of loans prior to their maturity'.[264]

'Guarantee business' is the issuance of guarantees and indemnities of any kind for others.[265]

Finally, 'giro business' is defined as the effecting of transfers and clearings, i.e. traditional payment services.

The attempt by the German legislator to define various traditional banking activities appears archaic in view of the multitude of activities carried out by modern banks. Nevertheless, it is significant that each of these activities results in financial risks being assumed. Thus credit business, discount business, incurring obligations and guarantee business all entail the assumption of credit risk by a bank. Likewise securities business is subject to market risk while giro business relates to payment risk. Finally, deposit and custody business are those banking activities where the consumer of banking services bears the risk of the bank defaulting.

There are, however, some limitations on the activities in which a bank may engage. Banks may not engage directly in investment business (i.e. providing investment services and advice) as defined in section 1 of the Investment Companies Act.[266]

Banks also may not engage in the **insurance business**, which means that they may not issue insurance policies. Insurance companies require a licence from the Federal Insurance Supervisory Office *(Bundesaufsichtsamt für das Versicherungswesen)* to conduct insurance business, and such licences will not be granted to banks. However, banks may act as brokers for the sale of insurance policies issued by licensed insurance companies. As will be discussed below, banks may also own insurance companies. While this does not represent true Bancassurance (namely the total integration of banking and insurance activities) the 'firewall' requirements are not onerous.

Exemptions from application of the Act

Certain institutions are specifically exempted from regulation and supervision in terms of the Banking Act, namely: the Bundesbank, the *Kreditanstalt für Wiederaufbau* (which is subject to the direct supervision of the Federal Government),

---

Acquisition of Securities (1937) and are both subject to special control of the FBSO by means of securities deposit audits under section 30 of the Banking Act.

[264] This definition relates to a special kind of revolving credit transaction, commonly referred to as '7-M-business', by which a party sells long-term loan claims to one or several institutions granting short-term refinancing and undertakes to repurchase such loan claims on a short-term basis with the aim to again re-sell the loan claims for short-term refinancing upon re-purchase.

[265] Examples of guarantee business are suretyships *(Bürgschaften)*, guarantees *(Garantien)* of any nature, and includes bid bonds, repayment bonds, performance bonds and guarantee bonds, the endorsement of bills of exchange and cheques and the granting of any other indemnity for others.

[266] On the other hand, investment companies are required to have a banking license (Investment Companies Act 1970: section 2(1)) if they want to engage in the business of banking.

insurance companies, insofar as they do not conduct banking business, and other institutions mentioned in section 2 (such as the Federal Post Office with respect to its savings banks and giro operations, and the social security authorities).

Permitted investments

A German bank may invest in other banks, as well as in commercial, industrial, and insurance companies. [267] The only limitation is that the aggregate book value of the investments of a bank that exceed 10 per cent of the capital of the target companies, must not exceed the equity capital of the bank.[268]

The 1993 Amendments to the Banking Act provide that a bank's 'significant investment'[269] may not exceed 15 per cent of the liable capital of such bank, and all such significant investments of a bank in the aggregate may not exceed 60 per cent of the liable capital of such bank (Section 12(5)).

Investments (significant or otherwise) in banks, financial institutions, and insurance companies are not subject to the 15 per cent and 60 per cent capital limitation (Section 12(5)). Apparently, the Legislator was of the opinion that because investments in banks, financial institutions and insurance companies are subject to regulation, they do not carry the same risk as investments in unregulated commercial and industrial enterprises.[270]

Consequently, investments in excess of 10 per cent of the capital of investee banks and financial institutions are not subject to the limitation that the total of such investments of an investor bank may not exceed the investor bank's liable capital.[271] The reason for disregarding these investments in banks and financial institutions from the 10 per cent limitation is that these investments are deducted from the

---

[267] This is in contrast to the UK requirements which separates banking from commercial, industrial and insurance activities.

[268] The 1993 Amendments to the Banking Act provide that the total book value of investments by a bank in **real estate**, buildings, operating and business equipment, ships and shares in banks and other enterprises, as well as in rights resulting from capital contributions made in the capacity as a silent partner *(stille Gesellschafter)*, rights from participation rights *(Genussrechte)*, and rights from loans pursuant to section 10(5a) of the Banking Act to other banks (subordinated loans), may not exceed the liable capital of the bank. Investments in shares of a company are disregarded for this calculation if they do not exceed 10 per cent of the capital of such company. In addition, investments in certain securities of a company held in the bank's trading account which do not exceed 5 per cent of the capital of such company are also disregarded for such computation (Section 12(2)).

[269] Investment of at least 10 per cent in an enterprise other than a bank, a financial institution, an insurance company, or a company providing supporting services to the bank.

[270] The Second Banking Directive (1989) saw a risk in participation by banks in other companies because such participation may affect the soundness of the bank if the subsidiary experiences financial difficulties (contagion risk) and because such participation constitutes a long-term commitment of the investing bank, but the Directive excluded banks and financial institutions from the restriction on participation.

[271] Investments of investee institutions are subject to limitations only if they exceed, in the aggregate, 10 per cent of the liable capital of the investor bank.

capital of the investor bank for purposes of computing its liable capital (Section 10(6)a).[272]

The above investment regulations are liberal as banks are free to invest as they choose but have to consider the effect of these investments on their capital adequacy.

8.2.3 Disclosure Requirements

Under section 44 the FBSO may: request from a bank any and all information pertaining to the bank's operations; inspect all books and records of the bank; carry out an audit, even without specific cause; attend shareholders' meetings and meetings of supervisory boards of banks and speak at such meetings; require from banks the calling of shareholders' meetings and meetings of the supervisory board. The FBSO may request that items specified by it for deliberation and resolution be placed on the agenda of such meetings. Consequently, section 44 allows the German regulator full access to all information related to the activities and hence risk exposure of a bank. However, there is no duty by German banks to specifically disclose risk-management information or to report excessive risk exposures.

8.2.3.1 Disclosure in Financial Statements and Supervisory Returns

Statutory returns

Banks are subject to comprehensive reporting obligations. The statutory basis for the directives on reporting obligations of banks is section 18 of the Bundesbank Act as well as numerous regulations or directives of the FBSO and the Bundesbank issued under the Banking Act. Most of the reporting obligations, which are required to be completed on prescribed forms, relate to financial matters, but reports must also be provided on certain organisational and administrative matters. A comprehensive tabulation of these reporting obligations would go beyond the scope of this Chapter and reference is accordingly only made to the most important or relevant requirements. There is no statement regarding the intention of the regulator as to why these statutory returns are required. However, as will become evident below, each of these reports relate to aspect(s) of banking risks.

The most important reports on financial matters, which must be furnished to the Bundesbank or the FBSO or to both institutions are:

Monthly returns *(Monatsausweise)* which are required under section 25 take the form of monthly balance sheet statistical reports *(Monatliche Bilanzstatistik)* conforming to section 18 of the Bundesbank Act. These extremely detailed reports constitute the core of the financial reporting system. These provide information relating to the portfolio of bank assets and thereby the diversification of credit risk. The reports must

[272] Non-significant (10 per cent or less) investments in investee banks and financial institutions that total 10 per cent or less of the liable capital of the investor bank are subject to the overall restriction that all such investments of a bank may not exceed the bank's liable capital (Section 10(6)a).

be submitted to the Bundesbank on prescribed forms in accordance with comprehensive guidelines issued by the Bundesbank. The Bundesbank then transmits a copy of the monthly returns to the FBSO.[273]

Monthly reports concerning compliance with Principles I,[274] Ia,[275] II[276] and III,[277] must be submitted together with the monthly returns. These reports are important from a risk-management perspective as they contain the information regarding the capital adequacy, interest rate risk, foreign exchange risk, off-balance sheet risk and liquidity risk of each bank.

Monthly reports showing the credit commitments to borrowers resident in Germany and the amounts drawn thereon *(Monatliche Kreditzusagenstatistik)* are to be submitted to the Bundesbank.[278] Parent banks must, in addition, submit consolidated monthly returns.[279]

Quarterly summary reports on credits extended to German resident borrowers as per the end of each calendar quarter *(Vierteljährliche Kreditnehmerstatistik)*. These quarterly reports must be submitted to the Bundesbank, who forwards a copy thereof to the FBSO.[280] These monthly and quarterly credit reports provide valuable information relating to the credit risk exposure of banks.

The Bundesbank also requires comprehensive monthly reports showing the foreign assets and liabilities of banks *(Monatliche Meldung 'Auslandsstatus')*. In addition, less comprehensive weekly status reports showing the short term receivables and amounts owing to non-residents must also be made *(Bankwöchentliche Kurzmeldung 'Auslandsstatus')*.[281] These reports give regulatory authorities additional information on the foreign exchange risks of banks.

---

[273] Directive of the Bundesbank regarding Monthly Balance Sheet Statistical Reports *(Anordnung der Monatliche Bilanzstatistik)*; Guidelines of the Bundesbank for the Monthly Balance Sheet Statistical Reports of Banking Institutions *(Richtlinien für die Meldungen der Kreditinstitute zur monatliche Bilanzstatistik)*.

[274] See paragraph 8.2.4.2.

[275] See paragraphs 8.2.5.3; 8.2.5.4 and 8.2.5.5.

[276] See paragraph 8.2.6.

[277] See paragraph 8.2.6.

[278] Directive of the Bundesbank regarding Monthly Reports on Credit Commitments *(Anordnung für die Kreditzusagenstatistik)*; Guidelines of the Bundesbank for the Monthly Reports on Credit Commitments *(Richtlinien zur Monatliche Kreditzusagenstatistik)*.

[279] Regulation on Monthly Returns *(Monatsausweisverordnung)*.

[280] Directive of the Bundesbank regarding Quarterly Reports on Borrowers *(Anordnung für die Vierteljährliche Kreditnehmerstatistik)*; Guidelines of the Bundesbank for the Quarterly Reports on Borrowers *(Richtlinien zur Vierteljährliche Kreditnehmerstatistik)*.

[281] Directive of the Bundesbank regarding Reports on Foreign Assets and Liabilities of Banking Institutions *(Anordnung für den Austlandsstatus der Kreditinstitute)*; Guidelines of the Bundesbank for the Reports on Foreign Assets and Liabilities of Banking Institutions *(Richtlinien für die Meldungen der Kreditinstitute über ihren Auslandsstatus)*.

On a monthly basis German banks issue minimum reserve reports *(Reservemeldung)* pursuant to section 9 of the Directive of the Bundesbank regarding Minimum Reserves. These reports are required for monetary purposes.[282]

Quarterly reports pursuant to the Country Risk Regulation *(Länderrisikoverordnung)* on credits extended to foreign borrowers. Parent banks must also furnish these reports on a consolidated basis. These reports are to be made by banks whose volume of credits to foreign borrowers exceeds DM 100 million. In the case of groups of banks, credits to foreign borrowers are required on a consolidated basis. These reports provide information with which country risk exposures by banks can be assessed.[283]

Separate reports are required on the extension of each large-scale credit (Section 13(1); Section 3 of the Regulation on Reporting), certain credits to related persons and entities (Section 16; Section 3 of the Regulation on Reporting) and three-monthly reports on million mark credits (Section 14(1); Regulation on Reporting 1985: section 5). In respect of large-scale credits an annual summary report must also be given, in the case of private commercial banks and branches of foreign banks as at September 30 of each year (Section 13(1); Regulation on Reporting 1985: section 3(2)).[284] These reports allow the management of the credit risks attached to large exposures.[285]

Together the above statutory returns required by the FBSO and Bundesbank allow the regulators to assess the risk-profile of each bank.

Other reports

Apart from these aforementioned reports on financial matters, certain reports on organisational or administrative matters must be made to the FBSO and the Bundesbank in terms of section 24. Such reports are to be provided, *inter alia*, on the appointment and removal of managers; the purchase and sale, or changes in the extent, of a participation in another company; changes of legal form, capital or articles of association; a loss of 25 per cent or more of the equity capital; the commencement and discontinuation of business activities not constituting banking business as defined in section 1(1); and intended mergers with other banks.[286] Obviously all of these factors will impact on the risk-profile of a bank and therefore need to be disclosed.

---

[282] See paragraph 8.4.1 below.

[283] See paragraph 8.2.5.2.

[284] The details regarding the procedure for these reports, including the forms to be used, are provided in the Regulation on Reporting (1985) issued by the FBSO. Certain exemptions from the duty to report on these matters are set out in the FBSO's Exemption Regulation.

[285] See paragraph 8.2.5.1.

[286] The details concerning the procedure for these reports are set out in section 8 of the Regulation on Reporting (1985).

Financial statements

Specific requirements apply to the preparation, auditing, reporting and publication of the annual financial statements of banks. As a rule, the annual financial statements must be compiled within the first three months following the end of the business year and be filed with the FBSO and the Bundesbank (Section 26). The format, presentation and contents of the annual financial statements for banks organised as corporations (i.e., AG's KgaA's and GmbH's)[287] are regulated by numerous regulations, guidelines and prescribed forms. Branches of foreign banks must also submit the annual financial statements of the foreign bank (in addition to the branch's annual accounts) (Section 53(2)) No. 3). This permits the regulatory authorities to gain an understanding of the risk-profile of the local branch as well as the parent bank.

Within five months after the end of the business year, the annual financial statements must be audited by an independent public accountant, approved by the appropriate organ of the bank (Section 27).[288]

Upon approval, the certified and approved financial statements and the annual report must be filed with the FBSO and the Bundesbank (Section 26(1)).

The annual financial statements and the annual report must be published in the Federal Gazette *(Bundesanzeiger)* within nine months after the end of the business year (Section 25(1); HGB 1970: section 325). This requirement is intended to facilitate general disclosure of the financial status of all banks. However the time limit allowed is such that a bank may have significantly altered its risk exposure by the time of publication, thereby detracting from the value of the publication requirement.

Finally, the approved annual financial statements and annual report of the bank must be filed with the Commercial Register (Section 25(1); HGB 1970: section 325) where they are open to public inspection. This ensures that the consumers of banking services are able to assess the risk-profile of a bank to the extent that this is possible utilising financial statements.

---

[287] The pertinent rules are primarily contained in the Regulation on the Forms for the Presentation of the Annual Financial Statements of Banking Institutions *(Verordnung über Formblätter für die Gliederung des Jahresabschlusses von Kreditinstituten)*(FBSO 1968), the Form for the Annual Financial Statements of Banking Institutions Incorporated as Stock Corporations, Partnerships Limited by Shares and Limited Liability Companies *(Formblat für den Jahresabschluß der Kreditinstitute in der Rechtsform der Aktiengesellschaft, der Kommanditgesellschaft auf Aktien und der Gesellschaft mit beschränkter Haftung)*, and the Guidelines of the Banking Supervisory Authority for the Preparation of the Annual Balance Sheet and Profit and Loss Statement of Banking Institutions Incorporated as Stock Corporations, Partnerships Limited by Shares and Limited Liability Companies *(Richtlinien für die Aufstellung der Jahresbilanz sowie der Gewinn- und Verlustrechnung der Kreditinstitute in der Rechtsform der Aktiengesellschaft, der Kommanditgesellschaft auf Aktien und der Gesellschaft mit beschränkter Haftung)* (Schneider 1986: 91).

[288] The format, presentation and contents of the audit reports are again prescribed by fairly extensive guidelines of the FBSO (1968).

In general the regulations relating to financial statements are disappointing as there is no requirement to shed greater light on the risk-profile of a bank as opposed to a mere accounting disclosure, as well as the lenient time limits allowed before disclosure of the information.

8.2.3.2 The Role of Auditors

Appointment and responsibility

In Germany, the extent of the auditor's involvement in the prudential control of banks, is determined by the supervisory authorities. The results of activities investigated as part of the audit, have to be incorporated into the audit report as part of the annual accounts (FEE 1993: 33).

No prior consultation with the supervisory authorities is required regarding the appointment or reappointment of auditors. However, the authorities have the power to veto the auditor's appointment or reappointment if the authorities consider that the appointed auditor lacks appropriate experience (FEE 1993: 40-41).[289]

The auditor's responsibilities are laid down in a general statement on responsibilities: General Conditions of Assignment *(Allgemeine Auftragsbedingungen)*. These general conditions are not mentioned in the auditor's report, but are attached to every report (FEE 1993: 58). There are no special regulations pertaining to auditors in relation to interim reports (FEE 1993: 58). Auditors are required to present an opinion on the reliability and continuity of computer systems designed for prudential purposes and the production of information used for financial reporting but not for management purposes (FEE 1993: 60). The auditor is required to state whether the internal accounting is in accordance with professional standards.

Relationship with the supervisory authorities

In the case of a normal audit of the bank's annual accounts, the auditor may communicate any information obtained in connection with his work to the client bank. The auditor is bound to keep such information confidential from the tax authorities and other third parties. However, **the auditor must notify the supervisory authorities of other facts of which he becomes aware during the audit which indicate that the business of the bank was not conducted properly** (FEE 1993: 46).

The auditor is required to provide the FBSO with a description of and an opinion on the **bank's exposure to the different banking risks**, the bank's approach to the monitoring of risks and the adequacy of the bank's assessment of risks and their cover in the form of a long report (FEE 1993: 61). The long form report includes a commentary on the following banking risks: credit risk, liquidity risk, interest rate risk,

[289] Audit appointments which have been accepted by the supervisory authorities can subsequently only be rejected for important reasons. Important reasons, in this context, do not include differences of opinion regarding the contents of the audit report, its qualification or disclaimer. The fact that an auditor does not seek re-election does not have to be reported to the supervisory authorities (FEE 1993: 42).

currency risk and market risk. Comment is also required on the development of the bank's operations; the internal organisation, profits, prudential returns, control of prudential ratios, legal lending limits, violation of the law and / or banking regulations or other irregularities; and observance of conditions for obtaining and maintaining a bank licence (FEE 1993: 63-64).

The auditor is also required to provide a special report to the supervisory authorities should he become aware of any of the following: material liquidity problems; material defects in the financial systems and controls; material inadequacies in, or omissions from any returns of a financial nature; any criminal offence; irregularities or infringements; serious shortcomings in the relationship between the bank and one or several of its customers; or any other circumstances indicating a risk or serious loss for the depositors (FEE 1993: 65).

The auditor is required to disclose facts which would justify a qualified opinion or the withholding of an opinion, or which relate to a deterioration in the bank's existence or development, or a serious violation of law or statutory regulation by the bank's management. The auditor is also required to provide the supervisory authorities with an opinion on the adequacy and reliability of the bank's internal control system and procedures in respect of: the accuracy, completeness and validity of prudential returns; the truth and fairness of the annual financial statements; as well as the adequacy and reliability of the bank's internal control procedures in respect of lending, foreign exchange trading and trust activities (FEE 1993: 67). The auditor is also required to provide the FBSO with an opinion on the following financial ratios: solvency; liquidity; capital adequacy and the coverage of investments by equity capital (FEE 1993: 68). Finally, auditors have to provide the FBSO with an opinion on the procedures for the evaluation of the provision for problem loans and other risk-related provisions as well as high level controls (i.e. the controls by which senior management assures itself that it is in possession of reliable information needed for the management of the bank) (FEE 1993: 69).

Relationship with the bank

The responsibility for the management of all corporations is spelt out in the HGB. In addition, the Banking Act specifies that bank management is responsible for the financial statements and returns that are submitted to the FBSO; and these responsibilities are explicitly set out in the auditor's report (FEE 1993: 51). In the case of a normal audit of a bank's accounts, the audit report must be sent to both the bank and the FBSO. The auditor is required to report to the supervisory authorities re the annual accounts and is obliged to give an opinion on whether the financial information present a true and fair view; whether the financial information is complete; whether the information is in accordance with instructions given by the supervisory authorities; and an opinion regarding the valuation policies applied (FEE 1993: 56).

The role of external auditors

In Germany, there is no distinction between a 'bank auditor' and a 'statutory auditor'. For the audit of the annual accounts, there is only one auditor who is appointed by the shareholders at a general meeting.[290]

8.2.4 Capital Adequacy

8.2.4.1 The Definition of Capital for Regulatory Purposes

The regulations pertaining to capital adequacy and liquidity which predate the Basle Agreement on Capital Standards, may be regarded as the core of German banking regulation.

The term 'liable capital' *(haftendes Eigenkapital)* is defined in section 10 which has been amended by the 1993 Amendments to incorporate the rules of the Own Funds Directive (1989). Section 10 lists the items that comprise liable capital.[291]

Section 10 further stipulates that specific items which do not serve as loss or insolvency protection be deducted from liable capital.[292] Furthermore, the sum of the reserves and provisions, capital received from participation rights *(Genussrechte)*, and subordinated debt may not exceed 50 of the remaining items of liable capital, known as core capital *(Kernkapital)*[293].

8.2.4.2 Measurement of Capital Adequacy

The measurement of equity capital is based on the last approved annual balance sheet (Section 10(7)), except in the case of branches of foreign banks, where the latest monthly supervisory return is applied (Section 53(2)).

---

[290] The FBSO has powers to appoint an auditor to carry out specific investigations on its behalf ('extraordinary auditors') in addition to the statutory auditor. The extraordinary auditor would normally be from a different firm of auditors than the bank or statutory auditor (FEE 1993: 71-73).

[291] These items include: the different types of equity capital; depending on the legal form of organisation of the bank (Section 10(2)); net profit to the extent such profit is allocated to the capital or retained earnings reserves of the bank (Section 10(3)); preferred stock (Section10(4a); certain reserves and provisions, subject to limitations (Section 10(4a), (4b) & (4c)); contributions of silent partners *(stille Gesellschafter)* meeting certain requirements (Section 10(4)); subordinated debt meeting certain requirements (Section 10(5a)), and, capital paid in against issue of participation rights *(Genussrechte)* meeting certain requirements (Section 10(5)).

[292] These items include: losses (Section 10(6a)); certain intangible assets (Section 10(6a)); certain holdings in other credit institutions or financial institutions exceeding 10 per cent of such other institution' capital (Section 10(6a)); and, certain holdings in other credit institutions or financial institutions of up to 10 per cent of such other institutions' capital to the extent that the total of such investments exceed 10 per cent of the liable capital of the investor bank (Section 10(6a)).

[293] For branches of foreign banks, the equity capital is deemed to comprise the operating capital made available to the branch by the foreign bank plus any retained operating surplus minus the credit balance on inter-branch account *(aktiver Verrechnungssaldo)*, if any (Section 53(2)).

On the basis of the statutory authorisation set out in section 100(1), the FBSO has issued Principles I and Ia forming part of the 'Principles Concerning the Equity Capital and Liquidity of Banking Institutions' *(Gründsätze für die Angemessenheit des Eigenkapitals und der Liquidität der Kreditinstitute)*(1969).

Until December 31, 1992, Principle I required that credits extended and participations held by a bank may not exceed 18 times the equity capital. Detailed rules applied as to the definition of the term credits and the credits not to be included, or to be included only in part, in the computation of such ratio.

As described above, the 1993 Amendments to the Banking Act transformed the Own Funds Directive (1989) into German Law, including its definition of liable capital, which is termed 'Own Funds'. In 1993 the FBSO incorporated the corollary to the Own Funds Directive (1989), the Solvency Ratio Directive (1989) of the EC, and its concept of risk-based capital adequacy by way of regulation under section 10. This regulation created a **new Principle I which requires a solvency ratio of liable capital to risk-adjusted assets and certain off-balance sheet items of at least 8 per cent**. The hitherto existing rule which required that assets of a bank do not exceed 18 times its liable capital was therefore superseded.

In terms of Principle I, the following are regarded as risk assets, namely: asset items[294], off-balance sheet transactions, financial swaps, forward contracts and option rights.

Consolidation

Section 10a[295] prescribes that banks forming part of a group must, as a group, maintain adequate equity capital. Principle I provides, accordingly, that the fundamental rule according to which risk-adjusted asset may not exceed a ratio of 8 per cent of liable capital, also applies to a consolidated group of banks. The determination as to whether a group of banks has adequate capital is to be made on the basis of consolidation of the equity capital on one hand and the risk assets, i.e. the credits and participations pursuant to the modified Principle I, on the other. Such consolidation of group equity capital and group risk assets is to be made in proportion to the share of nominal capital held by the parent bank in the respective affiliates. Included in the consolidation are all domestic and foreign banking, factoring and leasing affiliates in which the parent bank holds 40 per cent or more of the share capital or of the voting rights; or similar institutions over which the parent bank can exercise a controlling influence.

---

[294] The following are regarded as asset items: balances with central banks and postal giro offices; public sector debt instruments and bills eligible for refinancing with central banks; cash items in the process of collection; loans and advances to banks and customers; debt securities; shares; participating interests; shares in associate companies; fixed assets; assets in respect of which a bank has concluded leasing assets as the lessor; other assets and prepayments. Subject to a lower weighting being applied in some exceptional cases, these asset items are counted at 100 per cent of their basis of assessment.

[295] Introduced by the 1985 amendments of the Banking Act in implementation of the EC Directive of June 13, 1983 on the Supervision of Credit Institutions on a Consolidated Basis. The consolidation requirements became effective as of July 1, 1985.

The consolidation requirements result in group capital being measured in relation to group risk.

8.2.5 Risk Assets Limits

8.2.5.1 Loan Concentration

Sections 13 to 20 contain detailed rules regarding the extension of credits. The terms 'credit' *('Kredit')* and 'borrower' *('Kreditnehmer')* as employed in these provisions are defined in section 19.[296]

Large-scale credits

Large-scale credits (i.e. large credit exposures) are defined as credits to any one borrower which exceed 15 per cent of the equity capital of the bank (Section 13(1)). Section 13 deals with large-scale credits of an individual bank, section 13a thereof with their consolidation within a group of banks.

No single large-scale credit may exceed 50 per cent of the bank's equity capital (Section 13(4)). The aggregate of all large-scale credits together may not exceed 8 times the equity capital of the bank; in the application of the 'eight-times' rule, credit commitments not yet utilised are not taken into account, but only amounts actually taken up (Section 13(3)).[297]

Section 13a requires the consolidation of large-scale credits and essentially prescribes that the rules applicable to large-scale credit of an individual bank, according to which any credit may not exceed 50 per cent of the equity capital and all large-scale credits together may not exceed eight-times the equity capital of a bank, likewise apply to a group of banks on a consolidated basis. Consolidation is to be made in proportion to the share of nominal capital held by the parent bank in the respective affiliates. Included in the consolidation are all domestic and foreign banking, factoring and leasing affiliates in which the parent bank holds 50 per cent or more (as opposed to 40 per cent or more in the case of capital adequacy) (Section 13a(2)) of the share capital or of the voting rights or affiliates over which the parent bank can exercise a controlling influence.

---

296 'Credit' includes *inter alia*: loans of any kind; debts acquired for a consideration; acceptance credits; the discounting of bills of exchange, promissory notes and cheques; money claims originating from other commercial transactions of the bank; guarantees or other indemnities; the liability arising from the provision of security for the liabilities of others; participations of the bank in a borrower's enterprise amounting to 25 per cent or more of the share capital of such enterprise; and assets with respect to which the bank as lessor has entered into leasing agreements (Section 19(1)). In terms of the definition of 'borrower' certain related persons or entities are deemed to be a single borrower; in particular, all companies which belong to the same group of companies, count as one borrower (Section 19(2)).

297 Guarantees of any kind are normally to be taken into account at their full nominal amount, but in certain exceptional cases, only at one-half of their nominal amount (Section 13(6)).

These regulations relating to large credit exposures relative to a bank's capital base have the prudential purpose of managing credit risk by means of diversifying a bank's asset portfolio.

Million Mark credits (*Millionenkredite*)

Section 14 requires each bank to report to the Bundesbank, every three months, the names of those borrowers who have had at any time during the preceding three months obligations to the bank amounting to DM 1 000 000 or more resulting from loans extended. The report must state the amount of such obligation and provide certain information on the term and type thereof. Where the reporting bank has a non-German subsidiary which is to be included in the consolidation of large-scale credits, such report must include the respective information on million mark credits of such subsidiary (Section 14(1)). If a borrower has taken up million mark credits with more than one reporting bank, each bank will be advised by the Bundesbank of the total obligations of the borrower arising from such credits, the number of banks involved (but not of their names or the individual amounts) and of certain details re the term and type of the obligations (Section 14(2)).

This innovative regulation, of the German regulatory system, permit banks to improve their credit risk-management on a customer level as banks can form a better understanding of the total loans of a customer including those made by other banks. In effect, the Bundesbank fulfils a function akin to that of credit bureaux but on a wholesale level.

The Fifth Amendment to the Bank Act amended sections 13 and 14 of the Act to the extent that derivative exposures are also taken into account in the determination of large-scale and Million Mark Credits (Handelsblatt 1994: 37).

Credits to related persons or entities (*Organkredit*)

Special rules apply to loans extended to persons or entities having a special relationship with the bank, such as companies which are affiliated to the bank, or managers or members of its supervisory board, managers, partners, executive employees, supervisory board members, spouses and minor children of such persons, as per section 15.

An *Organkredit* may only be extended upon a unanimous resolution of senior bank management and must be expressly approved by the bank's supervisory board (if any) (Section 15(1)). In the event of failure to comply with these rules, the credit must be repaid immediately (Section 15(5)). Furthermore, if these rules are violated, managers and supervisory board members may be jointly and severally liable to compensate the bank for damages incurred in connection with the granting of such an *Organkredit*. The bank's claim for compensation may be enforced by a creditor of the bank to the extent that such creditor cannot obtain relief from the bank (Section 17).

Each *Organkredit* must be reported promptly to the FBSO and the Bundesbank if: it exceeds DM 250 000 where the borrower is an individual; or where the borrower is a juristic person, it exceeds both DM 250 000 and 5 per cent of the equity capital of the bank (Section 16).

The *Organkredit* regulations have the function of controlling credit risk attached to loans which are granted to persons closely associated with a bank. The regulatory concern is that such loans may have a higher credit risk as due care may not have been taken in approving the loans.

8.2.5.2 Country Risk

The issue of country risk is covered by the Regulation Regarding Information with Respect to Credits of Foreign Borrowers pursuant to the Banking Act *(Verordnung über Angaben zu den Krediten an Auslandischen Kreditnehmer nach dem Gesetz über das Kreditwesen)*, (FBSO 1985) which was promulgated in compliance with section 25(4) of the Banking Act.

Banking institutions whose volume of credit to borrowers with registered offices outside German territory exceeds DM 100 million are required to provide information on such transactions to the Bundesbank (Section 1(1)). The same applies to bank holding institutions *(Übergeordnete Kreditinstitute)* with proportionally consolidated credit exposures to borrowers outside German territory exceeding DM100m. Subordinate banking institutions are obliged to furnish the bank holding institutions with the information required for such a report (Section 1(2)). In determining the duty to report, all credits (commitments and utilisations) within the meaning of section 19(1) are taken into account in full (Section 1(3)).

8.2.5.3 Interest Rate Risk

Principle Ia was promulgated after the failure of Bankhaus Herstatt in 1974 to limit the risks from exposures to risks in foreign currency and precious metals. It has since been revised to extend the scope beyond such exposures to include risk exposures arising from derivative products. Principle Ia determines that certain specified interest risks arising from interest rate futures and interest rate options may, at the close of each business day, not exceed 14 per cent[298] of a bank's liable capital.

8.2.5.4 Foreign Exchange Risk

Principle Ia limits the foreign currency risk exposure[299] to specified percentages of the equity capital in order to prevent the incurrence of foreign currency risks which are disproportionate to equity capitalisation. The Principle requires that at the close

---

[298] As the 1993 Amendments to the Banking Act expanded the definition of liable capital in accordance with the Own Funds Directive, the percentage figure was reduced from 20 per cent to 14 per cent.

[299] The foreign currency risk exposure is determined on the basis of the middle rates of exchange for those currencies quoted on the Frankfurt Foreign Exchange Market *(Frankfurter Geldbörse)*, and on the buying rates for unofficial dealings in other currencies.

of business on each business day a bank's net open position in foreign currencies irrespective of maturities shall not exceed 21 per cent[300] of its equity capital.

Principle Ia(2) limits the open position in foreign currencies which mature in each calendar month to 40 per cent of the banking institution's equity capital and principle Ia(3) limits the open position in foreign currencies which mature within a calendar half year to 40 per cent of the bank's equity capital.

8.2.5.5 Off-balance Sheet Business

Principle Ia requires that at the close of each business day the net price risks under forward and option contracts involving price risks other than interest rate risks - provided that these contracts do not hedge the price risk of a portfolio of instruments - may not exceed 7 per cent of a bank's liable capital.[301]

In June 1986, new regulations were issued, requiring banks to cover themselves against off-balance-sheet risks. With effect from 1 October 1986, the FBSO amended Principles I and Ia. The new provisions were designed to take supervisory account of the growing tendency of German banks to conduct off-balance sheet transactions.[302] In effect, the FBSO adopted the method provided by the EC Solvency Ratio Directive (1989) in calculating credit equivalent amounts.

Banks may use either the original exposure method or the marking-to-market method. Under the original method the credit equivalent exposure is calculated by multiplying the relevant factor (see Appendix V) by the notional amount of the contract.

Principles 1 and 1a determine that off-balance sheet transactions are included in order to determine the risk assets of a bank.

8.2.6 Liquidity Adequacy

Under section 11, banks must at all times maintain sufficient liquidity. Based on the statutory authorisation contained in section 11, the FBSO has issued Principles II and III of the 'Principle Concerning the Equity Capital and Liquidity of Banking Institutions'.[303]

Principle II aims at keeping long-term lending and investments in a reasonable relationship to long-term financial resources by providing that the aggregate of

---

[300] In line with the 1993 Amendments to the Banking Act, the percentage figure was accordingly reduced from 30 per cent to 21 per cent.

[301] The percentage figure was reduced from 10 per cent by the 1993 Amendments.

[302] These transactions expanded from 29 per cent of banks' on-balance sheet business in 1986 to 56 per cent in 1989 (Bundesbank 1990).

[303] Swary and Topf (1992: 68) maintain that the German liquidity requirements constitute one of the most advanced banking regulatory frameworks in the world.

certain specified long-term asset items[304] shall not exceed the aggregate of certain specified long-term liability items.[305] Principle III limits the use of outside resources (i.e. deposits) for assets that cannot at all times be relatively easily sold.[306]

These Principles are a very inflexible and complicated set of rules and may not be the most efficient means of managing liquidity risk.

---

[304] The following are regarded as long term assets: balances with banks and advances to customers with maturities of four years or more; unlisted securities; participating interests; shares in a controlling company or a company holding a majority interest; land and buildings; furniture and equipment.

[305] The following are regarded as long-term financial resources: capital and reserves; liabilities (other than savings deposits) to banks and other creditors with maturities of four years and more; 10 per cent of call liabilities (other than savings deposits) to other creditors payable on demand and with maturities less than four years; 60 per cent of savings deposits; bonds outstanding with maturities of more than four years; 60 per cent of provisions for pensions; 20 per cent of amounts due to associated banks with maturities of six months and more but less than four years (Bundesbank 1993: 123).

[306] Principle III requires that: 20 per cent of balances with banks with maturities or periods of notice of three months and over but less than four years; loans and advances to customers with maturities or periods of notice of less than four years; bills of exchange drawn by the banks, discounted and credited to borrowers, and promissory notes drawn by borrowers, discounted and credited to them, in the bank's portfolio, and contingent claims in respect of such bills and notes in circulation; listed shares and investment fund units; and 'other assets'; less the value adjustments, must not exceed the sum of the following financial resources: 10 per cent of liabilities to banks payable on demand and with maturities or periods of notice of less than three months, other than loans and advances to customers on behalf of the bank; 50 per cent of liabilities to banks with maturities or periods of notice of three months and over but less than four years, other than loans and advances to customers on behalf of the bank; 80 per cent of liabilities to banks in respect of loans and advances to customers on behalf of the bank; 20 per cent of saving deposits; 60 per cent of other liabilities to other creditors payable on demand and with agreed maturities or periods of notice of less than four years; 80 per cent of liabilities in respect of business in goods and trade payables; 20 per cent of bonds outstanding with maturities of four years and less; 80 per cent of own acceptances and promissory notes in circulation and of bills drawn by the bank, discounted and credited to borrowers and promissory notes drawn by borrowers, discounted and credited to them, in circulation; plus the financial surplus or minus the financial deficit in Principle II, as the case may be (Bundesbank 1993: 123-125).

8.3 Protective Regulation

8.3.1 Crisis Management

8.3.1.1 Emergency Assistance

The German supervisory approach towards emergency assistance reflects the desire to rely on market forces, where possible. When Bankhaus Herstatt failed in 1974, there was no regulatory intervention to compensate bank creditors. Even Herstatt's cleared, but unsettled payments were allowed to default.[307] This consistent policy of providing little public support has enhanced the role of the market in restraining risk-taking at German banks (Kaufman 1991: 581), but evoked great criticism globally on the Bundesbank's unwillingness to compensate other banks for their settlement losses.

The measures applicable to failed or failing banks are formalised under section 47. If the economic difficulties experienced by banking institutions could lead to serious **disruptions of or damage to the economic system**, particularly **the functioning of the general payment system**, the Federal Government is, upon advice of the Bundesbank, authorised to:

- allow a banking institution a moratorium on the fulfilment of its obligations (Section 47 No. 1);
- disallow all or certain groups of banks from undertaking further banking activities (Section 47 No. 2); and
- temporarily close all stock exchanges (Section 47 No. 3).

The Federal Government must, in its announcement, regulate the terms applicable to the above. Although no further guidelines in respect of emergency assistance by the Bundesbank have been issued the wording of the Act suggests that systemic stability is the most important criterion and that the integrity of the payment system is viewed as important in this regard.

There is no duty to provide emergency assistance to failing banks. This can mainly be attributed to the existence of a very comprehensive deposit protection scheme[308] which serves to protect the major portion of individual depositors. Nevertheless, sections 47 and 48 provide the Government with considerable discretionary powers in dealing with problems of a systemic nature. The treatment of the Herstatt failure by the Bundesbank underlines these discretionary powers and indicates that the Bundesbank is willing to allow banks to fail if the stability of the banking system is not put in jeopardy.

---

[307] Leading to the identification of a hitherto unknown risk, namely settlement risk. See paragraph 3.4.1.

[308] See paragraph 8.3.2 below.

On the other hand, Müller (1993: 184) has argued that the emergency measures contained in sections 45-47 of the Act are inadequate to protect the interests of depositors or to prevent the dangers of chain reactions. Müller (1993: 185) therefore proposes that the Banking Act should specifically require that banks subscribe to deposit protection schemes. It is furthermore argued that the introduction of a legal duty to belong to such a scheme would remove one of the main conceptual flaws in the Banking Act, namely that is has been based on normal circumstances (*Normallfall*), whereas deposit protection assumes a worst case scenario according to the so-called *Maximalbelastungstheorie* (Müller 1993: 185). Nevertheless, Müller (1993: 185) concedes that the present voluntary system of deposit insurance largely addresses the issue.

8.3.1.2 Corrective Action

A bank's failure to comply with the equity capital or liquidity requirements laid down by the FBSO creates a presumption that the equity capital of the respective bank is inadequate or its liquidity insufficient. The bank must either provide reasons, to the satisfaction of the FBSO, that justify lesser requirements with respect to its equity capital or liquidity or must remedy the failure within a reasonable time. If it fails to do so, the FBSO may act in terms of section 45(1) and prohibit or restrict the distribution of profits or the extension of further credit by the bank. If the liquidity is insufficient, the FBSO may in addition prohibit the bank from investing available funds in certain assets as detailed in section 12.

A bank suffering from inadequate capital or liquidity has obviously taken excessive risks. Consequently the above regulations can be construed as an intervention by regulatory authorities to improve the risk-profile of a bank.

If a bank fails to maintain adequate equity capital or liquidity or to observe the restrictions on investments and does not remedy the situation, the FBSO has a right of more direct intervention in the activities and hence risk-management of a bank as laid down in section 45.

If the fulfilment of a bank's obligations towards its creditors, in particular if the security of the assets entrusted to the bank, is threatened, the FBSO may take appropriate action under section 46. In particular, it may:

- issue directives concerning the management of the bank's operations;
- prohibit or restrict the acceptance of deposits and the extension of credits;
- prohibit or restrict the managers' administration of the bank's operations; and
- appoint supervisors.

In such an event the FBSO may also proceed under section 46a and take the following temporary actions for the purpose of preventing the bankruptcy of the bank, namely: prohibit any transfer of assets and payments; close the bank for business with customers; and unless one of the deposit protection schemes undertakes to indemnify those making such payments, prohibit the acceptance of payments not made in or towards the settlement of debts owing to the bank (i.e. deposits).

If a manager of a bank is not 'professionally qualified' or 'reliable' or if the fulfilment of a bank's obligation to its creditors is under threat, the FBSO may require his removal and prohibit him from exercising his functions (Section 36(1)). The same applies if a manager intentionally or because of gross negligence violates provisions of the Banking Act, the regulations issued thereunder, or directives of the FBSO.

The above corrective measures are intended to provide protection to depositors by preventing bank management from engaging in further risks when banks have not adequately managed risks in the past and thereby caused deposits to be endangered.

The authority to move for bankruptcy proceedings and ultimately liquidation against a bank is vested exclusively in the FBSO (Section 46b). Also, a petition for judicial composition proceedings requires the consent of the FBSO (Act on Judicial Composition Proceedings: section 112(2)).

The FBSO may also revoke the banking licence and order the winding up of the bank in any of the circumstances described above.

8.3.2 Deposit Insurance

A deposit protection fund of German banks ('the fund') was established by the Federal Association of German banks ('Federal Association') *(Bundesverband deutscher Banken e.V.)*.

The purpose of the fund

The purpose of the fund is to provide assistance, to depositors, in the event of imminent or actual financial difficulties of banks, particularly when the suspension of payments is probable, in order to prevent the loss of public confidence in private banks (Section 2(1)).

Participation in the fund

All banks which are members of the Federal Association may participate in the fund provided that they: have an equity capital which meets the requirements of the FBSO when it grants banking licences in terms of paragraphs 32 and 33 of the Banking Act; have at least two suitably qualified and reliable managers; have a consistent (*ausgegliechenis*) profit history from current business; maintain the necessary liquidity; fulfil the requirements to be met for the orderly conduct of banking business in accordance with the provisions of the Banking Act; and are members of the auditing association of German banks *(Prufüngsverband deutscher Banken e.V.)* (Section 3(1)). Although the fund is *voluntary* the FBSO will in practice require that all new banking institutions become members.[309]

Private commercial banks, private mortgage banks, shipping mortgage banks and private banking institutions with special functions, which are not members of the Federal Association, may apply to participate in the fund if they meet the conditions set out above (Section 3(2)).

Funding provisions

Participating banks are required to pay to the Federal Association a yearly contribution of 0,3 per thousand German Marks of the balance sheet item 'liabilities from other credits arising from banking business' *(Verbindlichkeiten aus dem Bankgeschäft gegenüber anderen Glaübigern)* (Section 5(1)). In special cases the board of management of the Federal Association may determine a different base for calculating the contribution of individual institutions.

For newly established institutions, the lump sum payment and the first annual contribution may be decided subjectively, taking into account the business purpose and the expected development of the institution (Section 5(2)).

---

[309] See paragraph 8.2.1.1 above.

The board of management of the Federal Association may decide on a suspension of the payment of the annual contribution, if the assets of the fund have reached a reasonable level. If the assets are not sufficient for measures of assistance, the board of management may approve up to double the annual contribution (Section 5(3)).

Although the annual funding requirement of the deposit protection fund is related to the volume of deposits accepted by each bank, these contributions are not related to the riskiness of each bank and hence the risk attached to the deposits. Consequently, the fund has attached to it the moral hazards costs which arise when insurance premiums do not distinguish between differing degrees of risk. Effectively, the safer German banks covered are subsidising the more risky banks also covered by the fund.

Banks are permitted to disclose their participation in the fund by means of displays in their offices, by means of individual letters or in reply to questions regarding the kind of liabilities that are protected and the amount up to which liabilities are protected. However, banks are not permitted to advertise the protection of deposits or their participation in the fund in the media (Section 5(13)).[310]

Scope of protection

The following liabilities of banks are protected: all liabilities to non-banking institutions (in particular private persons, business enterprises and public agencies) which are shown in the balance sheet item 'liabilities to other creditors arising from banking business'.[311] This balance sheet item comprises mainly demand, term and savings deposits, and investment fund liabilities.[312]

---

[310] Each bank is required to include the following clause in its general business conditions *(Allgemeine Geschäftbedingungen)*:
'The bank is a member of the deposit protection fund of the Federal Association of German Banks e.V. Insofar as the fund or the nominee thereof shall make payments to a customer, the corresponding amount of the claim of such customer against the fund shall be transferred simultaneously to the fund. The same shall apply if in the absence of instructions from the customer, the fund makes payment to an account opened in his favour with another bank. The bank shall be entitled to furnish to the fund or its nominee all information and documents required in this connection.' (Section 5(4)).

[311] In determining protected liabilities, all liabilities to one creditor is added together; counter-claims of the bank, if any, are deducted (Section 6(4)). Payments also cover claims for interest falling within the protection limit. In principle, such claims accrue until the earlier of either the date of repayment of the principal or the institution of bankruptcy proceedings. However, the fund will only make payments of interest at market rates. In determining the market rates of interest, the interest rates of several deposits of the same type may be aggregated. Furthermore, the circumstances prevailing at the time when the fund declares its willingness to make payments may also be taken into account (Section 6(5)).

[312] The following liabilities are not protected even if they are included under the balance sheet position 'liabilities from other creditors arising from banking business': liabilities which are evidenced by bearer bonds; liabilities to managers, general partners, limited partners, shareholders, silent partners and members of the supervisory board of the bank; spouses and minor children of the above persons; and third persons acting for the account of any of the persons referred to above (Section 6(3)).

Each deposit is protected up to a protection limit of 30 per cent of the total equity capital of each bank. In respect of branches of foreign banks, the deposits are protected under section 6(1) up to a limit of 30 per cent of the equity capital of the branch.[313]

If a bank terminates its participation in the fund, the bank is required to give notice thereof to creditors to whom liabilities are owed and shall bring the consequences of the termination to their attention (Section 6(8)). A legal right to enforce the intervention of or payments by the fund does not exist (Section 6(10)).

General

The European Community Directive on a Community-wide scheme to insure depositors against bank failures came into effect on 1 January 1995. The Directive decrees that all depositors in a failed bank will be refunded at least 90 per cent of their first ECU 20 000 value in any account in an EC currency. The impetus behind the directive is the single European market which allows any bank properly supervised in one EC country the freedom to establish a branch in another EC country. The directive thus seeks to avoid a situation whereby different banks in the same country offer different levels of compensation (The Economist 1993(b)).

Within the bounds described above, German banks offer their depositors virtually unlimited protection. Consequently, foreign banks wishing to establish branches in Germany are required to 'top up' the insurance they offer to reach the German domestic level.

[313] In addition to the latest published annual financial statements, increases in capital which are recorded in public registers or recognised by the FBSO may also be taken into account on application by the bank (Section 6(1)).

8.4 Monetary Requirements

There are no regulations relating to credit ceilings or credit allocation in Germany. Interest rate ceilings apply only in the context of consumer protection as formalised in terms of the Consumer Protection Act *(Verbraucherschutzgesetz)*. The only monetary requirements of relevance in the regulatory context of risk-management is the use of variations in reserve requirements by the German Bundesbank.

8.4.1 Variations in Reserve Asset Requirements

Based on section 16 of the Bundesbank Act, the Bundesbank may require banks to hold a specified percentage of their liabilities arising from deposits or from short- and medium-term borrowings in non-interest-bearing accounts with the Bundesbank. Within certain limits the Bundesbank is authorised to set the percentages at different levels. The Directive of the Bundesbank on Minimum Reserves *(Anweisung der Deutschen Bundesbank über Mindestreserven)* (AMR) (1983), sets out the reserve requirements, the classes of liabilities for which minimum reserves must be maintained, and the balance to be held in the accounts. The minimum reserve system is intended to give the Bundesbank a flexible and effective instrument of monetary policy.

With effect from March 1994, certain changes were implemented with regard to the reserve requirements of the Bundesbank. The reserve requirement for call liabilities *('Sichtverbindlichkeiten')* was reduced to a uniform 5 per cent, thus doing away with the hitherto existing categories; whilst the distinction between short-term liabilities to clients inside as well as outside the German territory was removed.

The minimum reserve requirement for savings and term deposits remained unchanged at 2 per cent; but at the same time the eligible cash requirement *('Anrechenbarkeit von Kassenbeständen')* was reduced from 50 per cent to 25 per cent of the total reserve requirement.

In addition, the Bundesbank announced a number of simplifications regarding the AMR. Specifically, the concessions applicable to certain earmarked monies *(zweckgebundene Gelder)* (AMR: Section 2(4)b); as well as the liabilities flowing from foreign loans taken up on behalf of customers (AMR: Section 2(4)f) were withdrawn, and the calculation of 'eligible cash' for purposes of minimum reserves was simplified for the banks.

According to Meister and Hofmann (1994: 210-212) the motives of the Bundesbank for the changes were twofold: monetary considerations and competitive neutrality.

Monetary considerations

The reduction in costs associated with the simplification of the minimum reserve requirements allowed for a reduction in the interest rates charged by banks.

Furthermore, the reduction in the reserve requirement applicable to call liabilities relieved the pressure on banks to circumvent the requirements. Previously, the degree of differentiated treatment of call liabilities and savings / term liabilities prompted banks to develop deposit structures which, although in effect call liabilities, were treated as term liabilities or even as liabilities not subject to reserve requirements. Although such term manipulation *(Fristenmanipulation)* was not generally undertaken, the intensification of competitive conditions increased the potential of such instruments being used.

The relatively high reserve requirements which previously existed for call liabilities led to the outflow of funds to foreign financial centres. Such financial disintermediation negatively influenced the development of the German financial system *(Finanzplatz Deutschland)* and moreover confused the interpretation of monetary aggregates.

Competitive neutrality

Although acknowledging that no monetary policy measures can have an equal impact on the nearly 4000 banks in Germany, Meister and Hofmann (1994: 212) argue that the Bundesbank positively strives to achieve competitive neutrality to the extent that this can be reconciled with monetary objectives.

The concession regarding liabilities emanating from foreign loans favoured foreign banking institutions and presented practical difficulties.

Finally, the simplification and in some cases reduction of the minimum reserve requirements increased the efficiency of monetary regulation in Germany.[314]

[314] It is interesting to note that the Maastricht Treaty provides for the existence of minimum reserve requirements, although the scope and purpose thereof is not defined. Ten of the European Union's central banks use minimum reserves as a monetary tool. According to the Bundesbank, minimum reserves are an absolute necessity, however the German commercial banks disagree. Objections from the Bank of England have not made the Bundesbank budge from its position (Weller 1996: 18).

8.5 Summary and Conclusion

An analysis of the unique position of banks in any financial system has accentuated the role of regulations in protecting depositors from the serious consequences which could follow from bank failures. This is confirmed by the German legislator, which in the 1985 Banking Act, has provided for both prophylactic measures, aimed at regulating the risks which banks manage, as well as symptomatic treatment for banks who have failed to manage risks correctly. The German model of universal banking is commendable as it accommodates the tendency for financial conglomeration within a risk-related supervisory framework. The various regulatory components as well as the accompanying risk perspective thereon is summarised in Table 8.4.

Table 8.4 Prudential Regulation in Germany

Component	Risk Consideration
Licensing and ownership control	• Bank management must be reliable and professionally qualified to manage banking risks. • Shareholders should not be able to unduly influence bank management in the management of risks • Initial capital of DM 6 million results in a relatively low barrier to entry
Foreign bank entry	• Risk considerations similar to the entry of German banks
Permitted activities	• Definition of banking business covers some but not all financial risks managed by modern banks • German universal banking entails that banks may engage in insurance broking and all manner of securities business • Investment business may be carried out by separately capitalised subsidiaries
Permitted investments	• Banks may invest in other banks, as well as commercial, industrial and insurance companies. The risks attached to these investments are regulated by means of deductions from a bank's liable capital
Disclosure requirements	• Statutory returns contain all the information necessary to gauge the risk-profile of a bank although by means of financial disclosure • Financial statements prepared with reference to accounting standards rather than reflecting a bank's risk-profile
The role of auditors	• Auditors are required to provide FBSO with all information related to risk-management
Capital adequacy	• Principle I requires liable capital in relation to the risk-adjusted assets of a bank
Risk asset limits	• Credit risk regulations cover large exposures, million mark credits and loans to related entities • Country risk in excess of DM 100 million to be reported • Principle Ia limits interest rate risk, foreign exchange rate risk and off-balance sheet business • Principle II and III regulate liquidity risk, but are complicated and inflexible

It is significant that the German deposit protection fund offers depositors nearly unlimited protection. Although it can be argued that this leads to moral hazard, as the fund is not based on the risk-profiles of the contributing banks, the fund has lent a great degree of stability to the German banking system.[315]

A summary of protective regulation arrangements in Germany is contained in Table 8.5.

Table 8.5 Protective Regulation in Germany

Component	Risk Consideration
Emergency assistance	• Prevention of systemic risk • Discretionary reliance on market forces to penalise banks taking excessive risks by failure
Corrective action	• Regulations allow the FBSO to intervene in the risk-management processes of banks
Deposit insurance	• Membership in the deposit protection fund is voluntary but encouraged by the FBSO in the case of new banks • Flat rate funding does not distinguish between the risk-profile of banks • Depositors have nearly unlimited protection against the risk of bank failure

As in the UK the efforts of the BIS and the European Community has had a significant impact on the German Banking Act. Obviously this has brought an added dimension of risk orientation to the German banking supervisory system, yet it is clear that the Act has always been directed at the supervision of banking risks.

The avoidance of direct monetary requirements by the Deutsche Bundesbank signifies awareness by the German regulator of the prudential and monetary disadvantages inherent in such regulations.

In conclusion, the German system of banking regulation conforms to the research problem which argues that regulation in the practical world is directed at the risk-taking and risk-managing activities of banks with the objectives of protecting financial consumers and preventing systemic instability. The German regulatory framework takes cognisance of the fact that deposit-taking financial intermediation amounts to the management of a series of financial risks and seeks to regulate the management of these risks by banks.

[315] The deposit protection fund is, in a sense, the banking counterpart to the Deutsche Bundesbank, which has so cautiously guarded the stability of the German currency.

CHAPTER 9

THE REGULATION OF DEPOSIT-TAKING INSTITUTIONS IN SOUTH AFRICA

9.1 Introduction

This is the last of the three country-specific Chapters on banking regulation and deals with South Africa. Again the framework used is based on the concept expounded in Chapter 4 and distinguishes between prudential regulation (which directly influences the risks managed by banks); protective regulation (which seeks to protects depositors and / or deposit-taking institutions themselves); and monetary requirements which are instituted for purposes of monetary stability.

The aim of this Chapter is to demonstrate that South African banking regulation conforms to the postulated version of banking regulation which entails the regulation and supervision of a series of financial risks. It will be demonstrated that South African regulators have embraced the principles of risk-management as the conceptual basis of banking regulation. In terms of the theoretical model of financial regulation, South Africa has a very advanced banking supervisory system.

This is borne out by the SA regulatory approach which focuses not only on the regulations which will be discussed below, but also on the underlying considerations which are the optimisation of risk-management by banks. Consequently, SA banking regulators focus on the spirit rather than the letter of the law. This combination or formal rules which allow for informal adaptation has also impacted on the SA regulatory methodology which although primarily off-site in nature, relies on frequent interaction between banks and the regulator in order to discuss issues related to banks' risk-management.

9.2 Prudential Regulation

'The major question for the supervisor is whether a bank is sound. This is referred to as 'prudential' supervision. As a general rule the Bank does not concern itself with the individual contractual relationships a bank has with those who borrow from it, or its customers more widely, unless these matters raise clear prudential questions. Neither does the Bank become involved in the disputes that sometimes arise between banks and their customers.'

Wiese (1991: 313)

9.2.1 Entry Requirements

9.2.1.1 Licensing

'The requirements for banking licences are somewhat higher than those applicable to cafés - and for good reason.'

Jacobs (1987: 10)

Chapter III of the 1990 Banks Act[316] deals with the authorisation to establish, and the registration and cancellation of registration of banks. Section 11(1) determines that no business may conduct the activities of a bank unless it is a public company and is registered as a bank in terms of the Act. Any person who wishes to conduct the business of a bank must therefore apply to the Registrar for authorisation to establish a bank (Section 12(1)). The Registrar may, after considering all information, documents and reports furnished to him, grant or refuse the application or grant the application subject to certain conditions in his discretion (Section 13(1)).

The Registrar may not grant an application unless he is satisfied that: the establishment of the proposed bank will be in the public interest; the business the applicant proposes to conduct is that of a bank; the applicant will conduct the proposed business of a bank in the capacity of a public company; the applicant will be able to establish itself successfully as a bank; the applicant will have **adequate financial means**; the business of a bank will be conducted in a **prudent manner**; every person who is to be a director or an executive officer of the proposed bank is a **fit and proper** person to hold the office of such director or executive officer; and every person who is to be an executive director of the proposed bank has sufficient managerial experience (Section 13(2)).[317]

The above requirements are in accordance with the theoretical model of banking regulation as these relate to the soundness of new financial institutions based on the

---

[316] This Chapter contains numerous references to to 1990 Banks Act (previously Deposit-taking Institutions Act). Except where otherwise indicated all references to 'section' in this Chapter should be construed as pertaining to this Act. Likewise, all references to 'Registrar' refer to the Registrar of Banks. The regulations issued in terms of this Act were most recently consolidated in 1993. Where additions and alterations to these regulations have been made, these will be specifically refered to in the text or footnotes.

[317] The Registrar is able to revoke any authorisation given to establish a deposit-taking institution prior to the provisional registration if he is satisfied that: false or misleading information was furnished in the application; or the proposals contained in the application have not met with success within six months of registration (Section 14).

'fitness' of management to control and manage financial risk and adequate financial support which is required to engage in risk-management activities.

9.2.1.2 Foreign Bank Entry

Representative offices

A representative office may not conduct the business of a deposit-taking institution such as the accepting of deposits (Section 34). Consequently it is not necessary that requirements relating to risk-management apply to representative offices. Prior to establishing a representative office in the Republic, a deposit-taking institution established in a foreign country must however obtain the written consent of the Registrar. This consent will only be given if the competent authority in the foreign country certifies that the foreign institution concerned is authorised to conduct business in such foreign country which is similar to banking.

South Africa's re-entry into the global markets has prompted a number of requests by foreign banks to also establish subsidiaries and branches in South Africa. In light of the above developments, the South African Reserve Bank have set out a number of specific statutory requirements to be included with the application for the establishment of a banking operation in South Africa.

Subsidiaries

In respect of subsidiaries of foreign banks these requirements include the following (KPMG 1995: 1-2):

- two copies of the Memorandum and Articles of Association;
- the names, and curricula vitae, of directors and executive officers of the proposed bank;
- the predominant business activities in which the bank is likely to be engaged;
- an outline of a business plan in the short, medium and long term;
- a selected number of risk returns to be completed for the ensuing year; and
- the policy to be followed by the proposed bank in the management of each type of banking risk and the effect, quantified if possible, of each type of risk on the business.

In the case of domestic subsidiaries of foreign banks the risk of bank failure ultimately lies with the parent banking institution. Consequently the regulatory responsibility lies primarily with the relevant foreign supervisory authority. Nevertheless subsidiaries of foreign banks may accept deposits and South African regulatory authorities are therefore correct in requiring a degree of information related to the risks managed by subsidiaries.

Branches

In the final parliamentary session of 1994, the Banks Act was amended to allow foreign banks to open branches in South Africa. In 1995 the South African Reserve Bank drew up the regulations governing their entry.

The current Registrar of Banks, Christo Wiese (Business Day 1995: 1) said that the South African Reserve Bank had recommended that foreign branches fulfil the capital requirements demanded of local banks. The branches would also have to provide domestic cover, which means that their local capital requirements would have to be met by local assets. The South African Reserve Bank had furthermore recommended that the activities of foreign banks be limited to wholesale business and that any retail activity be conducted through a fully fledged subsidiary in South Africa.[318]

Local branches of foreign banks are subject to virtually all of the regulations, including reporting procedures, which apply to locally registered banking companies.[319] Branches must maintain a minimum 'Endowment capital' of the greater of R50 million and 8 per cent of risk-weighted assets as calculated for locally registered banking companies.[320] Endowment capital can essentially comprise the head office account including retained branch profits.[321]

Foreign banks with net assets greater than US$1 billion and an investment grade rating from an international rating agency may apply to form a local banking branch. The procedures to be followed are similar to those of full banking subsidiaries. The foreign bank holding company is required to provide a letter of comfort and understanding, confirming certain matters including that it:

- understands and accepts the objective of maintaining financially sound branches in the interest of an efficiently functioning financial system in South Africa;
- will adhere to the minimum standards of consolidated supervision of banking groups set out by the Basle Committee on Banking Supervision;
- understands and accepts its responsibility to comply with the Banks Act and related regulations;
- undertakes to ensure that branch management are fit and proper to fulfil their duties;
- accepts responsibility for the operations of the branch; and

---

[318] Wiese (Business Day 1995: 1) warned, however, that the proposed regulations would not automatically guarantee the legitimacy of the branches of foreign instititutions. 'If you cross-checked the failed BCCI bank against the criteria I've mentioned, it would have met them all.' The SARB would therefore have additional discretionary powers. 'We will have to look at the capital structure and attempt to pierce the corporate veil before allowing it to open up here'.

[319] For a more comprehensive discussion see South African Reserve Bank (1995: 12-14).

[320] See paragraph 9.2.4.1.

[321] The regulations do not preclude funding of a branch by means of interest bearing debt but the tax implications of such funding would need to be carefully considered.

- undertakes to maintain the endowment capital of the branch and to safeguard the financial soundness and stability of the branch.

The Registrar of Banks must also be satisfied that the foreign bank's home supervisor applies certain minimum standards (primarily those set out by the Basle Committee on Bank Supervision); accepts its responsibility as home-country supervisor; will endeavour to ensure that the holding company directors and management are fit and proper to carry out their duties; is satisfied with the standard of risk-management by the parent bank; and is committed to keeping the Republic's supervisory authorities informed of market information regarding the safety and soundness of the foreign bank and the branch.

This demonstrates the importance attached to prudent risk-management by foreign branches even if the bank holding company has very large net assets.

While the South African Reserve Bank attempted to achieve competitive neutrality between local and foreign banks as regards banking regulation, this was not fully achieved on the taxation front as foreign banks operating through a branch were not subject to the 15 per cent secondary tax on companies levied on local financial institutions (Sharpe 1995: 7). This brought down the effective tax rate of foreign banks and allowed them to put pressure on the margins of local banks.

Consequent criticism by the local banking industry was passed on to the Finance Ministry, as tax legislation falls outside the ambit of the South African Reserve Bank. In the 1996 Budget, legislative changes to the Income Tax Act were announced which brought foreign and local banks on an equal footing as far as taxation is concerned.

However, local banks may still be at a disadvantage vis-à-vis foreign banks as their margins are slimmed by the foreign risk premium attached to attracting funds from outside South Africa; and the cost of liquid assets[322] and reserve requirements[323] for locally sourced deposits. Koseff (Finance Week 1996: 34) estimates that local banks may pay up to 89 basis points more for funds than their offshore competitors.

[322] See paragraph 9.2.6 below.

[323] See paragraph 9.4.1 below.

9.2.1.3 Ownership Control

> *'Prior to authorisation, anyone who is to occupy a position as a Managing Director or a Director of a bank, and anyone who is to control a bank as shareholder or in any other way must satisfy the South African Reserve Bank that he has sufficient experience for the position he is to occupy. Essentially the considerations are probity, competence, diligence and soundness of judgement'*
>
> (Wiese 1991: 314).

Restriction on shareholding

Under the 1965 Banks Act, as amended, a natural person and his associates' shareholding could not exceed 10 per cent and a financial company and its associates could not hold more than 30 per cent of the total nominal value of the shares in the deposit-taking institution.

The restriction on shareholding of a deposit-taking institution and of a controlling company has been amended as the concentration of ownership in the relatively small South African economy made it difficult to keep ownership within the regulations of the Banks Act. The change in the definition and the increase in the percentage holding allowed, are aimed at preventing financial institutions falling into financial difficulties as they are more likely to obtain support if needed from 'big brother' with a 49 per cent holding than from and entity with a 30 per cent holding. The initial approach was to protect the independence of banks as intermediaries, whereas the present approach assumes a reduction in the risk of bank failure if large and financially sound shareholders exist.

Section 36(1) of the 1990 Banks Act accordingly now prevents any person or his associates holding shares in a deposit-taking institution or its controlling company in excess of 49 per cent of the total nominal value of the shares in the deposit-taking institution or its controlling company, although the Minister may make exceptions.[324]

Permission for acquisition of shares

The Banks Act of 1990 introduced a new principle whereby permission has to be obtained prior to the acquisition of a shareholding in excess of 10 per cent (including existing holdings) of the issued shares. The reason for this new principle is to ensure that only fit and proper persons become large shareholders and to prevent the exercising of undue influence on the affairs and consequently risk-management activities of a deposit-taking institution. The ownership control regulations underline the importance which South African regulatory authorities accord to the stability of the financial system and its susceptibility to inadequate risk-management as a consequence of ownership influence.[325]

---

[324] The only exception known to the writer is Advocate Christo Wiese (not to be confused with the Registrar of Banks) who individually controls in excess of 49 per cent of the shares in Boland Bank Limited via a series of pyramid companies.

[325] The provisions of section 37 regarding the permission for acquisition of shares are summarised as follows: a person cannot acquire shares in a deposit-taking institution or controlling company if the

Restriction of right to control a deposit-taking institution

Subject to the provisions of section 36(2), only the following 'persons' may exercise control over a deposit-taking institution: a deposit-taking institution itself, or a public company registered as a controlling company in respect of such deposit-taking institution.[326]

This provision exists to ensure that all controllers of banks are subjected to various prudential requirements.

Application for registration of a bank holding company

Under the 1965 Banks Act, as amended, registration as a bank controlling company was merely a formality and once the minimum requirements had been fulfilled, the application was duly granted. The 1990 provisions provide higher barriers of entry into the financial market, thereby ensuring that a deposit-taking institution is not manipulated for the benefit of the controlling company, but is rather able to fulfil an independent function in the interests of all shareholders and depositors. If for example a holding company were to experience financial difficulties, a bank might suffer by association or even come under pressure to lend to the holding company.

The application for registration as a holding company must be made in writing to the Registrar and he has the power to request such additional information in connection with the application as he requires to make his decision. The application for registration as a controlling company can only be made in respect of a registered deposit-taking institution (Section 43).

An application will not be granted unless the Registrar is satisfied that: the registration is not contrary to the public interest; every director or executive officer is a fit and proper person to hold such office and that they have sufficient knowledge and experience to manage the affairs of the applicant in its capacity as a controlling company; no interest which any person has in the applicant is inconsistent with a provision of this Act; and the applicant is financially sound (Section 44).

---

total nominal value of shares held will exceed 10 per cent of the issued share capital, without first obtaining written permission. For an anticipated shareholding of: more than 10 per cent but not more than 17,5 per cent; more than 17,5 per cent but not more than 25 per cent; or more than 25 per cent but no more than 30 per cent, the permission of the Registrar is also required. A more onerous provision is made for shareholdings in excess of 30 per cent in that the Minister has to approve the shareholding. Such permission will not be granted unless the Registrar and Minister are satisfied that the proposed acquisition of shares: will not be contrary to the public interest; and will not be contrary to the interests of the deposit-taking institution or its depositors or of the controlling company. In both instances, the permission is only granted after consultation with the Competition Board.

[326] Section 42(2) states that a person shall be deemed to exercise control over a deposit-taking institution if that person and/or his associates: hold shares in the deposit-taking institution in excess of 50 per cent of the nominal value of issued share capital (unless due to limitations on voting rights attached to those shares they are unable decisively to influence the outcome of the voting at a general meeting of the deposit-taking institution) or are entitled to exercise more than 50 per cent of the voting rights in respect of the issued shares; or have the power to determine the appointment of the majority of directors of that deposit-taking institution.

Permitted investments

The restrictions on a controlling company's non-banking investments contained in the 1965 Banks Act, as amended, have been retained in the 1990 Banks Act, but no provision has been made for a situation where the restriction has been exceeded.

Section 50 which deals with this can be summarised as follows: A controlling company investing money in: undertakings other than deposit-taking institutions or controlling companies; or foreign banking institutions; or companies of which the main object is the holding or development of property which is used for the purpose of conducting the business of a deposit-taking institution; or fixed property which is not used for the purpose of conducting the business of a deposit-taking institution, are required to limit the total of these investments to 40 per cent of its total share capital and reserves.

The purpose of these investment restrictions is to ensure that a controlling company does not over-extend itself in other investments and thereby limit the access of a bank to the capital resources of the controlling company.

9.2.2 Permissible Business Activities

Classification as a deposit-taking institution

The 1990 Banks Act removed the distinction between the various types of deposit-taking institutions in existence prior to this Act. The Act adopts a functional rather than an institutional approach insofar as it addresses the function of accepting and employing deposits and not the institutions acting as deposit-taking institutions. Consequently, two of the most important definitions in the Act are those relating to 'the business of a deposit-taking institution' and 'deposit'.

A company will be classified as a deposit-taking institution if it carries on any or all of the following: acceptance of deposits from the general public as a regular feature of the business; soliciting of, or advertising for, deposits; utilising the money accepted by way of deposit or any income earned from such money for the granting of loans to other persons, investment by any person acting as investor, or financing by any person of any other business activity conducted by him; obtaining as a regular feature of the business, money through the sale of an asset to any person other than a deposit-taking institution, subject to an agreement in terms of which the seller undertakes to purchase from the buyer at a future date the asset so sold or any other asset (i.e. repurchase agreements); or any other activity which the Registrar may declare to be the business of a deposit-taking institution.

The business of a deposit-taking institution does not include: acceptance of a deposit by a person who does not do so on a regular basis and who has not solicited or advertised for such deposit and does not hold deposits from more than twenty persons nor do these deposits amount to more than R500 000; the borrowing of money from its members by a co-operative; any activity of the public sector,

governmental or other institution or anyone else designated by the Registrar; or, an act of money broking which culminates in a money lending transaction on the same day on which the money broker concerned received his instructions; the acceptance of money against debentures provided such money is used for granting normal trade credit; or any deposit-taking activities which are performed under, authorised or controlled by an Act of Parliament.

The 1994 amendment to the Banks Act excludes from 'banking business' the operation of a stokvel,[327] a credit union, an employees' savings scheme and a temporary building society, which are allowed to operate as savings schemes. As these are not banks, they are not required to comply with the prudential and reporting requirements of the Banks Act. In order for self-regulation to be effective, modest restrictions were imposed, such as a R9,9 million limit on the value of 'deposits' which a savings scheme may accept from the public. The exemption of stokvels from complying with the Banks Act indicates that the South African Reserve Bank recognises the role of these informal financing schemes and, as such, was the first regulatory authority in Africa to do so. Organisations which desire to accept a greater quantity of deposits have to register as mutual banks. These are required to have a capital base of R10 million (as opposed to R50 million for banks), but are otherwise subject to the same requirements as banks.

Sokvels are allowed to operate as savings schemes, provided members have a common bond (through membership of a society of some sort) and accept and use money pooled for a specific purpose, such as maintenance or laying-in-expenses at childbirth.

The three largest types of stokvels are savings, burial and party stokvels, which constitute roughly 40 per cent, 30 per cent and 10 per cent of the market (Financial Mail 1996(b): 32). They are effectively investment syndicates as the savings are awarded to an individual member on a strictly rotational basis.

Other lesser-known schemes fall outside the scope of the net as they operate informally on a lesser scale.[328]

The issue of informal financing schemes has been highlighted by the recent (January 1996) decision of the Registrar of Banks to close down the operations of Sun Multiserve, an 11 month-old scheme bearing no resemblance to a traditional stokvel.[329] Investigations revealed that the organisation had 28 branches and offered exceptionally high returns to about 53 000 investors. Sun Multiserve did not comply

---

[327] The concept of a stokvel has existed for decades in South Africa. The name is a corruption of the 'stock fairs' held by early settlers. Participants used to pool money and the benefit (the animal bought) went to one member at a time.

[328] An example of such a scheme is Mashonisa, which involves one person borrowing from another and paying back at month- end with up to 60 per cent interest. The loans involved do not fall within the ambit of the Usury Act as they are below the R6000 barrier.

[329] The 1995 Bank Supervision Department Annual Report highlights the main differences between bona fide stokvels and pyramid schemes (South African Reserve Bank, 1995: 8).

with any of the requirements of the Banks Act. The high returns of up to 300 per cent a month offered to "depositors" were generated by means of a pyramid structure.

Definition of a deposit

A deposit is defined as an amount of money paid by one person to another person subject to an agreement in terms of which: an equal amount or any part thereof will be conditionally or unconditionally repaid with or without a premium on demand or at specified or unspecified dates or in circumstances agreed upon and interest may or may not be payable at specified intervals or otherwise even though the initial payment is limited to a fixed amount and may not be subject to repayment terms and interest clauses.[330]

Should legislation enabling the establishment of money market funds become effective, as is currently anticipated, the Banks Act will have to be amended to make provision for money market fund 'deposits'.

Exclusions from the application of the Act

Section 2 specifically excludes the following entities from the provisions of this Act: the South African Reserve Bank; the Land Bank; the Development Bank of Southern Africa; the Corporation for Public Deposits; the Public Investment Commissioner; and the Mutual Building Societies.[331]

The most significant institution no longer excluded from the provisions of the Act is the Post Office Savings Bank which was previously regulated in terms of its own Act. The inclusion is believed to be a result of the possible future privatisation of Post Office functions, although the Post Office Savings Bank may be retained by the State for providing financial services to the rural areas.

The Minister can also designate, by notice in the Government Gazette, that any other body or institution is to be exempt from the provisions of the Act. This exemption has been introduced with the objective of accommodating certain exceptions, e.g. local authorities and mining finance houses. [332]

The scope of financing activities not falling within the application of the 1990 Banks Act is a contentious issue. The quantum of assets exempted is large and the inherent risks not immaterial.

---

[330] A deposit does not include an amount of money paid: as an advance in terms of a contract for the sale, letting and hiring or other provision of movable or immovable property or of services; as security for the performance of a contract or as security in respect of any loss arising from non-performance of a contract; as security for the delivery or return of any movable or immovable property; by a person who is a close relative, a director or executive officer of the person to whom the money is paid; or as a contribution by a member of a registered Pension Fund.

[331] The latter grouping is regulated in terms of the Mutual Banks Act (Act 124 of 1993).

[332] At present these exemptions include the following: mining houses, securitisation schemes, commercial paper, a group of persons between whom a common bond exists, participation bond schemes, unit trust schemes, Post Office Savings Bank and Industrial Development Corporation of SA Limited.

While it is accepted that not all these activities can be married with the Banks Act, it should nevertheless be the aim to foster the risk-management philosophies expounded in terms of the Act. The permission granted to mining houses to conduct inter-group lending should be reconsidered. Mining houses should be treated in the same manner as other companies in the South African economy. The accepting of inter-group deposits is by no means a core activity of a mining house. Considering the parlous state of the South African mining industry, it is the writer's opinion that the mining houses face considerable and inevitable restructuring in the near future in order to remain globally competitive. One aspect of such restructuring would be to 'outsource' deposit-taking and other treasury functions of mining houses to banks who are better equipped for the financial risk-management requirements of such activities.[333]

Permitted activities

Section 80 determines that no bank and no associate[334] of a bank, should, either jointly or individually, hold shares in any registered **insurer** as defined in section 1 of the Insurance Act, 1943, to the extent to which the nominal value of those shares exceeds 49 per cent of the nominal value of all the issued shares of such insurer. In cases where at the commencement of the Banks Act this ratio was exceeded, the bank and its associates were permitted to retain the shares in question, but they were not allowed to acquire any further shares in the insurer as long as the 49 per cent ratio was exceeded.

However, regulatory authorities are paying increasing attention to the diversity of financial services (e.g. portfolio management, banking, assurance) offered by financial conglomerates. The Jacobs Committee (Republic of South Africa 1992: 69) supported the opportunities for rationalisation offered by the formation of financial conglomerates, provided that separate subsidiaries are established for the various financial services. The Jacobs proposals envisage banks owning insurance companies and vice versa, thereby increasing the options available to management.[335]

The South African banking landscape has to a large degree been shaped by the withdrawal of foreign banks from the domestic economy in the wake of financial

---

[333] Indeed, a practical example is provided by the Anglovaal group and Randgold who have both mandated Rand Merchant Bank Limited to manage their treasury functions.

[334] For the purposes of the aforegoing: '*associate*', in relation to a bank, means a holding company of that bank; or a company of which such holding company is a subsidiary; or a fellow subsidiary of that bank; or a subsidiary of that bank or of such fellow subsidiary.

[335] The RMB Holdings Limited structure represents a unique example in which a bank holding company controls a life assurer who in turn controls a bank (Ed Hern, Rudolph Inc 1992:4). In terms of this structure Momentum Life Assurers Limited took over Rand Merchant Bank Limited in exchange for which the former shareholders in Rand Merchant Bank Limited acquired control over Momentum Life Assurers Limited via the RMB Holdings Limited vehicle. However, for purposes of complying with the Banks Act, Momentum Life Assurers is the registered bank holding company.

sanctions.[336] In most cases the vacuum left by the departing controlling shareholders could only be filled by the life insurers who had funds available for such large investments. Consequently, all the major South African banking groups are presently owned by insurance companies (Wiese 1996(a)).

Interestingly, Wiese (1996(b)) argues that this shareholding structure is undesirable and should ideally be the converse, i.e. banks owning assurer / insurance companies, although this is presently not allowed in terms of section 80 of the Act.[337]

However, it is evident that the demarcation lines between South African banks and life assurers are fading. The traditional distinction, where long-term and short-term savings products were associated with life companies and banks respectively, is no longer appropriate.[338] Consequently, the existing corporate controlling structure may need to be adapted by either a divestiture or merger of respective interests.

Restrictions on securities business

The deregulation of the JSE[339] in 1996 permitted corporate membership of the exchange and thereby paved the way for banks to trade both as brokers and as principals in the South African equity market. In contrast to the UK and Germany, South African banks are required to conduct their securities activities through separately capitalised entities.

After much debate the FSB in 1996 imposed uniform capital adequacy requirements for all members of financial exchanges - the JSE, the South African Futures Exchange and the Bond Market Exchange. This preserved competitive neutrality for banks and non-banks operating securities business.[340] However, banks may not be in a position to make a clear distinction between banking and securities business, especially when it comes to hedging risk.

---

[336] Foreign banks re-entering the South African economy will probably experience greater difficulty regaining market share than at the time of severing South Africa's umbilical cord.

[337] See paragraph 7.2.2 for discussion of the UK approach which does not expressly prohibit banks from investing in insurance companies but relies on moral suasion to discourage banks from doing so.

[338] For example, Standard Bank and Liberty Life have since 1978 had a successful association; with operational (in terms of the cross-selling of products) and financial benefits to both companies. Speculation (Ivor Jones & Roy 7 December 1995) is that Standard Bank would like to earn underwriting profits on traditional life products while Liberty Life may apply for a banking licence.

[339] See paragraph 5.5.2.2.

[340] The capital adequacy requirements ('CAR') on the securities trading activities of banks are based on the Capital Adequacy Directive of the European Union. The Basle Committee's proposals on market risk had not been finalised by the end of 1995. Consequently, these CAR requirements will apply to South African banks until the Basle Committee's proposals are finalised. Banks are permitted to apply a simplified method of calculating the capital requirement, which results in a relatively higher capital requirement, or a more complex building block approach, which results in a relatively lower capital requirement.

Permitted investments

A deposit-taking institution is restricted by the Act in the amount which it may invest in immovable **property**. The total investment[341] in fixed property and equities is not to exceed the total of its issued primary share capital and primary unimpaired reserve funds. Properties taken into possession to protect an investment are not included in this calculation for a period of five years from the date of purchase.

The Act also restricts the amount which a deposit-taking institution may invest in or lend to its **associates** - this maximum is 10 per cent of the institution's liabilities (Kelly 1993: 272).[342]

While not explicitly stated, the restriction on property investments by banks exists for prudential purposes, i.e. to reduce the exposure of banks to investment risk.[343] Consequently, these restrictions fit into the general model of regulation of risk-management.

9.2.3 Disclosure Requirements

9.2.3.1 Disclosure in Financial Statements and Supervisory Returns

> *'Reëls en regulasies kan maklik omseil word, maar die beginsels en standaarde nie so maklik nie. Ons wil eerder 'n omgewing skep en standaarde en beginsels neerlê wat gesonde beginsels van risikobestuur bevorder. Dit kom uit die ondervinding toe ons gekyk het na die bestuurstate van goeie banke om te leer hoe hulle hul risikos bestuur.'*
>
> Dr Hennie van Greuning quoted by Von Kyserlingk (1994: 53).

A deposit-taking institution cannot be managed prudently without adequate systems for keeping up-to-date records of all its transactions and commitments in such a manner that management is continuously aware of the bank's financial condition and the risks to which it is exposed. The South African Reserve Bank views the supervisory returns required in terms of the Banks Act as an appropriate risk-management tool for management.

Relatively onerous disclosure requirements and the submission of information have been regarded by certain bankers as a limitation on a bank's autonomy. However, as Booysen (1991: 292) argues, most of the disclosures made to the South African Reserve Bank are not available for external purposes and are treated as extremely confidential by the regulatory authorities. Compliance with disclosure requirements may be onerous to bank management. On the other hand, increased disclosure to the general public should strengthen the role of the market in disciplining bank

---

[341] The investment in property may be made by way of investment in or loans to a property owning subsidiary.

[342] See paragraph 8.2.2 for a discussion of the German approach which similarly allows banks to invest in other banks, as well as in commercial and insurance companies, subject to certain capital restrictions.

[343] It is an obvious principle of risk-management that the same capital cannot support the risk exposure of various companies.

management.[344] It is therefore important that the costs and benefits of disclosure are carefully weighed up against one another.

Risk-based disclosure

Table 9.1 provides a summary of the risk-based returns required from South African banks. These returns encompass all the financial risks that are managed by banks. The objective of these disclosure requirements is to provide both bank management and regulators with information relevant to the **maintenance of effective risk-management by banks**. As banks are able to use the statutory returns for their own risk-management purposes, the benefits derived by banks from compliance with these disclosure regulations are intended to exceed the costs entailed by such compliance.

Table 9.1 Risk-based Returns required from South African Banks

FORM NUMBER	HEADING OF FORM
DI 100	Balance sheet
DI 110	Off-balance-sheet activities
DI 200	Income statement
DI 300	Liquidity risk-maturity ladder
DI 310	Minimum reserve balance and liquid assets
DI 400	Capital adequacy
DI 401	Consolidated balance sheet
DI 402	Counterparty risk
DI 403	Foreign operations of South African banks
DI 410	Interest-rate risk
DI 420	Market risk (Position risk)
DI 430	Trading risk
DI 500	Credit risk
DI 505	Report of large exposure
DI 510	Large exposures
DI 520	Assets bought in
DI 600	Currency risk
DI 700	Restriction on investments, loans and advances
DI 701	Asset-backed securitisation
DI 702	Return regarding investments and interests held
DI 703	Return regarding shareholders of bank / controlling company

Pursuant to Section 75(3), the Registrar can require that a deposit-taking institution furnish him with information relating to the extent and management of risk exposures in the conduct of its business. The Registrar can also request further information regarding a deposit-taking institution's assets and liabilities.

Where a deposit-taking institution carries on its activities through a subsidiary, branch office or other agency outside the Republic, then it must incorporate, in the returns noted above (re prudential requirements), the information relating to such entities as well as furnishing the information separately.

[344] See paragraph 10.3.4.

In the case of a group of deposit-taking institutions, the holding company of the group must, in addition to the returns furnished by each deposit-taking institution, furnish the Registrar, by means of a consolidated return, with the required details of the group as well as any information relating to the above-mentioned entities.

In January 1994 the South African Reserve Bank issued a circular expressing concern about banks that directly or indirectly guarantee financial services transactions of entities within the group, thus binding the bank 'legally or morally' to meet the obligations in case of default (Business Day 1994: 3). Banks are therefore required to submit a consolidated balance sheet and an organogram of the group, as well as details of non-bank entities in the group that are involved in financial activities.

It is also required that banks disclose the market and trading risks in financial markets: fixed interest securities, currency, equity and commodity markets. Banks have to distinguish between whether the company was acting as a principal or agent in those markets, and must show its capital and reserves, own assets and assets under management. The South African Reserve Bank must also be informed of the number of non-bank entities on behalf of whom banks are acting as risk managers; settlement volumes and outstanding contracts of all entities and their settlement limits (Business Day 1994 : 2).

Generally accepted accounting practice (GAAP)

Unless expressly otherwise provided in the Act or the Regulations, all the prescribed risk-based returns have to fairly present the financial position and the results of the operations of a bank. Unless departures therefrom are specifically authorised by the Act or by the Registrar, the annual financial statements of a bank and of a controlling company are required to be compiled in accordance with GAAP as required by section 286(3) of the Companies Act, 1973.[345]

Of particular relevance to banks, Accounting Standard AC 120, which was issued by the South African Institute of Chartered Accountants, became effective as from 1 January 1996. The principal objective of this statement is to prescribe specific disclosure in the financial statements of banks in order to give users a better understanding of the special characteristics of banks and to assist them in evaluating the banking risk, financial position, performance, cash flow information and investment activity of such enterprises. It also encourages the presentation of a commentary on the financial statements which deals with such matters as the management and control of banking risk. This statement does not deal with the measurement of the elements of financial risks of banks.

---

[345] The South African accounting profession is currently engaged in a harmonisation project that will bring local accounting standards in line with those issued by the International Federation of Accountants. Changes in accounting policies and refinement of the basis of measurement by South African banks can therefore be expected over the next years (Price Waterhouse 1995: 36).

The disclosure requirements of AC120 are more extensive and specific than those contained in the Companies Act. The detailed requirements are set out in Appendix VI.

Specific risk-related disclosures required by AC 120 include: significant concentration of assets, off-balance sheet liabilities; movements in provisions against loans and advances; specific bad debt provisions; general bad debt provisions; commentary on banking risk-management and control; commentary on adequacy of capital; and commitments made and other contingencies.

Audit report

In addition to any report that a bank is statutorily required to obtain from the auditor of a bank, the auditor is also required to report on the bank's financial position and the results of its operations as reflected in all the returns that were submitted to the Registrar as at the financial year-end.[346]

The auditor is also required to report whether, in his opinion, the information contained in the returns at year-end in all material respects: reasonably reflects the information of the management accounts; is complete in so far as all relevant information contained in the accounting and other records at the reporting date has been extracted therefrom and recorded in the returns; is accurate in so far as it correctly reflects the information contained in, and extracted from, the accounting and other records at the reporting date; and is prepared using the same accounting policies as those applied in the management and statutory accounts.

In arriving at his opinion, the auditor has to report the extent of reliance placed on the internal risk controls of the bank, as established and maintained by directors, relating to financial and regulatory reporting, and compliance with the Banking Act and risk regulations.

General

Accounting Standard AC 120 has significantly improved the disclosure by banks of financial information and will enable users to obtain a greater understanding of the risk-profile of a bank. However, financial statements are still drawn up on the basis of historic-cost accounting which in an inflationary environment such as the South African one, inevitably fail to fully capture the various banking risks. The deficiency in accounting requirements accentuates that banking auditors have an increased responsibility relative to auditors of non-financial companies as they are an important role player in the overall risk-management process.

---

[346] The audit report is required to be rendered in accordance with the wording and practices recommended from time to time by the South African Institute of Chartered Accountants.

9.2.3.2 The Role of Auditors

The role of the auditing and accounting profession has become very important in the bank supervision process. Bank supervisors need not duplicate the contribution of auditors as one of the key players in the risk-management process, provided that proper liaison mechanisms are established.

Appointment

The appointment of an auditor of a deposit-taking institution falls within the ambit of the Companies Act with two provisos, namely: the appointment of the auditor has to be approved by the Registrar; and where the total assets of the deposit-taking institution exceed R10 billion, two auditors independent of each other have to be appointed (Section 61).

The Registrar has the power to refuse an application of appointment as auditor.

Function of the auditors in relation to the Registrar

The Act requires that the auditor may inform the Registrar of any matter relating to the affairs of the deposit-taking institution of which the auditor became aware whilst performing his function as auditor and which relates to the Registrar's supervisory functions, although **there is no legal duty** to do so.

The Registrar can request the auditor to provide written information on any matter mentioned above or any matter which concerns the Registrar's supervisory function. In addition, a specific provision has been included in the Act which indemnifies the auditor who furnishes such information in good faith from any provision of the law, any breach of professional conduct or any liability to any person.

Audit committee

In 1988 the National Commission on Fraudulent Financial Reporting (commonly called the Treadway Commission) in the UK recognised the audit committee as a keystone of corporate governance. In the light of the South African King Committee's report on corporate governance and its terms of reference, which included, *inter alia*, the monitoring and quality of information received by the board, the Bank Supervision Department believes that the audit committee and internal auditors have a vital role to play in ensuring that the board receives relevant and reliable information to enable the board to make decisions regarding the operations of a company. The concept of an audit committee, which was generally found to be operating effectively in practice for the leading South African banks, was introduced as a specific legal requirement in Section 64.

The role and responsibilities of the audit committees and internal auditors is highlighted in the 1994 Annual Report of the Bank Supervision Department (South African Reserve Bank 1994: 12-14).

Examples of issues that fall within the responsibilities of the audit committee follow below.

The audit committee should ascertain that management is prepared to report on the effectiveness of the internal controls over financial reporting and compliance with law and regulations, and is addressing other requirements pertaining to the safety and soundness of the institution. Since internal control has increased in importance owing to the emphasis placed on corporate governance and the concerns expressed about the standards of financial reporting and accountability in South Africa, it is imperative that the audit committee should assess whether the internal control systems are effective and that they ensure the reliability of financial reporting, as well as compliance with applicable laws and regulations.

The functions of the audit committee are: to assist the board of directors in the evaluation of the internal control system, accounting practices, information systems and auditing processes applied in the day-to-day management of its business; to facilitate communication of above matters between the board of directors, auditors and internal audit function; and to introduce such measures which will enhance the credibility and objectivity of annual financial statements and reports prepared by the deposit-taking institution.

The audit committee must consist of at least three members of the deposit-taking institution's board of directors and the majority of the committee members must be persons who are not employees of the deposit-taking institution (Section 64).

Internal auditors

The internal audit department of a bank should be directly accountable to the audit committee, thereby enhancing the internal auditors' independence. The internal audit function of a company should have as its mission to provide the board of directors with an independent review of the bank. Internal auditors should ascertain that adequate accounting systems and internal controls are in place and operating effectively to ensure proper disclosure of banking risks and that the affairs of the company are managed according to the policies adopted by the board of directors.

However, the delegation of these duties by the board of the directors to the internal auditors does not relieve the directors of their responsibilities. The internal auditors should be seen as a management tool by the board of directors and should be used to:

- Identify risk exposures within the group and to review the systems of internal controls in order to determining their effectiveness.
- Assist the audit committee in assessing whether the risk-management process is effective.
- Propose solutions to resolve problems and to improve future performance.
- Monitor the implementation of and compliance with approved policies and internal control systems.

To achieve the above, the internal auditors should be independent from management and have full, free and unrestricted access to all activities, records, property and personnel of the group. They should therefore report to the audit committee, which consists mainly or solely of non-executive directors.

The role of external auditors

The 1990 Banks Act emphasises the role of the external auditor by stating that the Registrar of Banks may direct a bank to furnish him with a report by a public accountant on any matter or any aspect relating to that institution (Section 7). The regulator can also identify a specific risk (and statutory return) that should be evaluated by accounting firms (Van Greuning 1993: 88). The role of the external auditor is further defined in Section 63 which requires the auditor to inform the Registrar when he becomes aware of anything regarding a bank that may be of concern to the regulatory authority.

A new development in the 1990 Banks Act is that the external auditor is required to meet with the supervisory authorities, as well as the audit committee directors and bank management in a trilateral meeting once the audit has been completed (Section7).[347]

It is important that the role of auditors should change from a mere balance sheet audit to an audit of banking risks in order to enhance the overall risk-management process.

General

The extensive functions of auditors are directly related to the prudential concerns of South African banking regulators who rely heavily on the information as presented in supervisory returns and financial statements. It is also clear that auditors have a specific role to play in the overall risk-management process of banks by their assessment of the effectiveness of internal risk controls and the risk exposure of banking institutions. The acceptance of the proposals in AC120 should enhance the information contained in the financial statements of banks, while the additional reporting responsibilities for auditors and increased independence of auditors will assist in ensuring the credibility of the information reported in the financial system.

One of the most effective measures available to harness the power of the market is to publicly disclose relevant and reliable information, in order for the market to come to its own conclusion based on its assessment of the risks and returns involved. While annual financial statements of banking institutions are generally available to the public, the only return disclosed is the DI 900. It is therefore recommended that the Banking Supervision Department should consider disclosing a greater degree of risk-based information to financial market participants.

---

[347] According to Van Greuning (1993: 89) this meeting has been instituted following the success of a similar approach in the UK. See paragraph 7.2.3.2.

9.2.4 Capital Adequacy

9.2.4.1 The Definition of Capital for Regulatory Purposes

The Basle Agreement on Risk-based Capital was signed at the Bank for International Settlements (BIS) in Basle, Switzerland in July 1988 by Central Bank representatives from the Group of Ten (G10) countries and Luxembourg.[348] The agreed framework is designed to establish minimum levels of capital for internationally active banks. National regulators were therefore left at liberty to adapt the arrangements by setting higher levels. Although South Africa was not a signatory to this agreement, its legal framework conforms closely to the Basle standards as adapted to the specific South African circumstances.

One of the main objectives of the Banks Act was to bring South African banking legislation into line with accepted international standards in order to ensure a sound and efficient banking system, thereby affording greater protection to depositors.

A deposit-taking institution is required to ensure that the total of its Tier One and Tier Two capital is never less than: the greater of R50 000 000 or a percentage of certain assets and other risk exposures multiplied by risk-weights, as is prescribed by regulation. The Banks Act definition of capital (as well as a comparison with the BIS definition) is contained in Appendix VII. The applicable risk-weightings in South Africa and a BIS comparison are contained in Appendices VIII and IX.

South African capital requirements have been raised significantly to fall in line with the guidelines set by the BIS, although the phase-in period to meet requirements, meant that South African banks need only have complied with the minimum of 8 per cent risk-weighted capital by 1995 as opposed to 1993 in the case of G10 countries. The phase-in prescriptions were as follows:

Periods	Percentage
1 January 1991 to 31 December 1991	4.5
1 January 1992 to 21 January 1993	5.0
22 January 1993 to 20 January 1994	6.0
21 January 1994 to 19 January 1995	7.0
20 January 1995 and thereafter	8.0

According to Wiese (Business Day 1996: 17) the South African Reserve Bank would be more comfortable with a risk-weighted capital adequacy ratio of over 10 per cent, although no regulatory steps have been taken in this regard. As banks are at their greatest risk during the first years of their existence, the South African Reserve Bank

[348] The Basle Agreement demonstrates the commitment of international bank regulators to capital adequacy as the centerpiece of regulation. It recognises that capital adequacy and other forms of bank regulation must be co-ordinated on an international level with the objectives of the new framework being to strengthen the soundness and stability of the international banking system and to reduce competitive inequality among international banks through the consistent application of the framework to banks in different countries.

requires at least 10 per cent capital adequacy from new banks entering the market (Business Day 1996: 17).

Undisclosed reserves

Historically, banks have been entitled to avail themselves of certain provisions of the Companies Act enabling them not to disclose certain information in their annual financial statements. In terms of the 1965 Banks Act, banking institutions were not required to disclose their true profits or hidden reserves.

Hidden reserves, the amount of which had to be reported to the Registrar once a year, could not be used by a bank to comply with its capital requirements. A bank could at any time transfer a portion of its hidden reserves to its unimpaired reserve funds, in which event such reserves became part of its capital resources (Jacobs 1983: 5).

Booysen (1991: 292) notes that past empiric research has revealed that accounting principles have often not been adhered to in South Africa, as these were not legally enforceable. Booysen (1991: 293) argues that the historic purpose of accounting principles is to identify the appropriate accounting standards and to limit the differences in variety of the various accounting conventions without striving for strict conformity or a set of inflexible rules. Accordingly, Booysen (1991: 293) concludes in favour of an accounting principle to ensure uniform disclosure by banks and related companies.

With effect from 1 January 1994 however, the disclosure requirements relating to financial statements of banks have been expanded in that the exemptions previously allowed both in terms of GAAP and in terms of the Companies Act no longer apply. In addition, the revised accounting statement AC120[349] requires full disclosure of hidden reserves of banks.

In terms of the overall risk-management paradigm, the full disclosure of hidden reserves is favoured as it enables regulatory authorities and investors alike to assess the true amount of capital which is available to cushion the loss which may arise from the exposure of a bank to financial risk.

Consolidated supervision

Another issue presently confronting regulators in South Africa is the application of consolidated supervision. Consolidated supervision is required in the case of:

- conglomerates of multifunctional institutions;
- financial groups under a bank holding company; and
- institutions which operate across borders.

[349] Vide supra paragraph 9.2.3.1.

The South African Reserve Bank's concern about the risks incurred by banks on behalf of non-bank companies were brought to the fore in the Sechold debacle. In December 1993, an unsupervised subsidiary of the Sechold banking group, Securities Equities Limited, incurred large losses in futures trading when it entered into a large bear position and the JSE experienced a bull run. This resulted in the bank itself eroding its capital base as it had not only financed Securities Equities, but also guaranteed its liabilities. Sechold was eventually rescued by Investec Holdings while the futures portfolio which had caused the failure was taken over by Rand Merchant Bank; thereby averting any danger of systemic repercussions.

In 1996 the Banking Supervision Department implemented a manual on consolidation supervision. The Banking Supervision Department's supervision of group risk covers only those non-banking companies within a banking group whose activities may affect the operations of the bank itself (South African Reserve Bank 1955: 11). In line with the minimum standards set by the Basle Committee on Banking Supervision, banking groups are required to report on consolidated capital adequacy and consolidated large exposures.

However, should banking groups contain entities that are regulated by the FSB these are merely discussed at quarterly meetings with representatives of the FSB.

This is regarded as insufficient supervision as banks may still be subject to risks not captured in terms of the processes set out by the Bank Supervision's manual on the management of group risk and not detected at quarterly FSB meetings. It appears improbable that the latter can provide a proper understanding of consolidated risk of all the various banking groups in the South African economy, especially considering the often complicated group structure of the conglomerates in question.

Moreover, banks may be affected by the operations of other institutions within a group even if these institutions do not engage in risk-management themselves.[350]

Finally, as cross-border expansions of South African financial institutions increase, so will the host country responsibilities of banking and other supervisors.

9.2.5 Risk Assets Limits

The capital requirements imposed by the South African Reserve Bank are based on the BIS risk assets approach. The use of the risk assets ratio method as a prime banking regulatory tool once again confirms the research problem which states that current supervisory techniques are aimed at controlling the risk exposure of banks. However, this approach which entails weighing a bank's assets into broad categories according to their risk-profile, and then expressing the capital base as a percentage of the weighted portfolio of risk assets, differs in some instances from the weightings used by the BIS.

---

[350] Some of the individuals who sold debentures in Masterbond and Supreme were associated with banking subsidiaries engaged in insurance broking. In order to protect their reputation, certain banking groups reimbursed individuals who suffered losses due to the demise of Masterbond and Supreme.

A comparison between the BIS and Banks Act risk-weightings of various on-balance sheet risk assets is provided in Appendix VIII.

9.2.5.1 Loan Concentration

The risk assets approach is appropriate when a bank has a diversified portfolio of loans and investments. Particular risks may, however, arise when a bank puts too many of its eggs in one basket and lends heavily to a single borrower.

In 1977, following the failure of certain smaller banks, the supervisory authorities investigated the possibility of imposing a limit on a bank's exposure to any one customer and its associates. However, in view of the predominantly large role played by large companies and integrated groups of companies in the economy, the idea was eventually discarded.

In order however, to alert the attention of the authorities when a bank extends too large a share of its credit facilities to a particular client and its associates, a system of reporting these large credits once a year to the Registrar was introduced in 1978. In terms of this requirement a banking institution had to furnish the Registrar at the end of its financial year with a return reflecting all instances where its financing facilities to a client and customer exceeded 10 per cent of its paid-up capital and unimpaired reserves (Jacobs 1983: 5).

Section 73 of the current Banks Act requires approval of the Board of Directors (or a Credit Committee appointed by the Board) before a bank can invest with or grant loans, advances or other credit to an individual person and its associates in excess of 15 per cent of the bank's capital and reserves. Where any transaction which on its own or together with any other previous transaction exceeds 15 per cent of the aggregate capital and reserves, the bank must report such exposure to the Registrar.

The absolute limit placed on large exposures to an entity is 25 per cent of a bank's capital, compared with the 15 per cent ceiling required by the BIS. According to Wiese (1996(b)) this can be ascribed to the concentrated nature of the South African economy and the fact that a small number of companies dominate the economic scene.

It is of relevance that a new derivative instrument is emerging in international financial markets to manage the risks of loan concentration. Credit derivatives can be applied by South African banks with large exposures to single entities which may occur due to the concentrated nature of the South African economy. Essentially, credit derivatives are loan substitutes: rather than to syndicate a loan, a bank can enter into a risk participation agreement with another bank. The second bank would be paid a fee for accepting the risk of default; while the interest income is paid to the bank which extended the loan. Newly established foreign banks may be the most active in the local credit derivative market as it provides a means of quickly generating an income stream (Financial Mail 1996(a): 35).

The employment of such credit derivatives would clearly allow more prudent credit risk-management by banks as well as allowing regulatory compliance with BIS guidelines.

9.2.5.2 Country Risk

South Africa introduced stringent exchange controls on non-residents in 1961 when large outflows of capital occurred.[351] The existence of these controls has to a large extent obviated the need for country risk guidelines. While most banks have in-house procedures for managing country risk where applicable, these are not prescribed by regulation other than those imposed by exchange controls.

Exchange Control Regulations, Orders and Rules are amended from time to time, and are issued in terms of the Currency and Exchanges Act (1933). These regulations define the range of foreign currency transactions that may take place in South Africa or may be carried out with the permission of the Treasury by residents of South Africa. The Treasury has delegated authority to deal with most exchange control matters to the South African Reserve Bank, which in turn has delegated considerable authority to certain commercial banks which have been licensed as authorised dealers.[352]

The Exchange Control Rulings issued by the Exchange Control Department of South African Reserve Bank set out the powers granted to authorised dealers and the rules and procedures to be followed by them in dealing with day-to-day matters relating to exchange control.

The published regulations regarding South African exchange control practice and policy are not exhaustive. A considerable degree of flexibility is built into the system in that the authorities exercise substantial discretionary powers in approving or rejecting applications that fall outside basic policy. Because of the technical nature of the terminology, exchange control rulings are not made available to the public (Price Waterhouse 1995: 21).

9.2.5.3 Interest Rate Risk

The South African Reserve Bank views interest rate risk as relating to the impact on income resulting from the repricing of assets, liabilities and derivatives at different points in time (RSA 1993: 69). The market risk[353] of changes in the capital value of investments resulting from changes in interest rates are reported in form DI 420.

---

[351] For a short overview on exchange controls in South Africa see paragraph 5.5.2.3.

[352] In the strict sense this practice is legally unsound as it conflicts with the legal maxim *delegatus delegare non potest* which holds that delegated powers may not be further delegated.

[353] Market risk is the risk that the market price of an asset could change, which will result in a potential loss to the reporting bank on realisation of that asset. Examples of market / price movements are changes in interest rates, share prices and prices of commodities. The financial instruments, assets and related derivatives to be included in the return are those that can be readily disposed of in established or acknowledged markets for financial instruments, derivatives and commodities (RSA 1993: 72).

Three elements primarily encompass the risk associated with interest rates, namely, the margin between the rates earned on assets and paid on liabilities, the repricing potential of assets and liabilities at different points in time, resulting in mismatches in various time bands between assets, liabilities and derivatives and, lastly, the period over which these mismatches persist.

The 'flow' approach is used, to reflect, per time band, the total amounts of assets and liabilities and derivatives that can be expected to reprice. All balance-sheet items and derivative market activities that have a bearing on the interest-rate exposure of a bank should be included in this return.

All on-balance-sheet items are reported at book value, while derivative market items are reflected on an equivalent basis. All relevant foreign-exchange items are also included in this return (RSA 1993: 69).

9.2.5.4 Foreign Exchange Risk

The information required by the South African Reserve Bank in form DI 600 comprises the reporting bank's:

- foreign-currency assets (except infrastructural investments used for purposes of carrying banking activities) and liabilities;
- commitments to purchase or sell foreign currency; and its
- net long or short position in options and futures contracts in foreign currency and gold.[354]

Commitments of the reporting bank to purchase or sell foreign currency under forward contracts are shown at their market values at the close of business on the reporting date.

The effective net open position in any one foreign currency and in all foreign currencies taken together, should not at the close of business on any one day exceed an amount equal to 10 per cent of the net qualifying capital and reserves of the reporting bank (RSA 1993: 90).

9.2.5.5 Off-balance Sheet Business

The risk asset approach described in 9.2.5 also incorporates certain risks run by a bank but not shown on its balance sheet, such as guarantees. Again, the weightings used by the South African Reserve Bank may differ from those of the BIS, as can be seen in Appendix IX.

---

[354] The net long/short position in options and futures contracts in foreign currency and gold is calculated as follows: The sum of the gross value of potential purchases of foreign currency and gold in terms of put options granted, call options held and futures contracts, minus the sum of the gross value of potential sales of foreign currency and gold in terms of put options held, call options granted and futures contracts (RSA 1993: 90).

9.2.6 Liquidity Adequacy

Banks seldom hold enough 'ready' money to meet all of their obligations at once, but they are required to have adequate liquidity to meet their obligations as they fall due. This entails holding enough cash / liquid assets and ensuring that the future profile of cash flows is appropriately matched (Wiese 1991: 314).

During the first quarter of 1993, the basis for the calculation of liquid assets was amended. The calculation is presently based on 5 per cent of total liabilities to the public, reduced by cash-management schemes and set-off.[355]

The minimum balance of liquid assets held at any time may not be less than an amount equal to 75 per cent of the average daily amount of liquid assets required to be held by the bank. The daily liquid asset holdings should average out at a minimum of 100 per cent of the required holding for the month.

No foreign currency assets, except gold coin and bullion shall qualify as liquid assets. Only assets not pledged or otherwise encumbered may be utilised as liquid assets.[356]

Although true liquidity risk may be less than 5 per cent of deposits, the South African liquidity requirements have the advantage of being uncomplicated and hence easy to administer.

---

[355] The basis for the calculation of liquid assets was amended in 1993. Previously, the calculation was based on 20 per cent of short-term liabilities, less certain short-term transactions in respect of repurchase agreements. At the same time the definition of liquid assets was amended to exclude bankers' acceptances, and other acknowledgement-of-debt instruments, so as to ensure that a conceptually sounder basis was employed. This resulted in a decrease in the level of the statutory liquid assets required to be held (South African Reserve Bank 1994: 13).

[356] Liquid assets comprise: South African Reserve Bank notes and coin, gold coin and bullion; Gold coin and bullion; Clearing account balances with the South African Reserve Bank; Treasury bills of the Republic; Stocks issued under Section 19 of the Exchequer Act, 1975 with a maturity of not more than 3 years; Securities of the South African Reserve Bank with a maturity of not more than 3 years; Short term bills issued by the Land Bank.
Only cash that is physically held by banks, in their own vaults, or held on their behalf at and by SBV Services (Pty) Limited, may be claimed as credit in respect of vault cash when the cash-reserve and liquid-asset requirements are determined.

9.3 Protective Regulation

The above paragraphs have all clearly demonstrated that South African banking supervisors aim to regulate banks by virtue of their various risk exposures. By means of the risk-asset ratio these risks are weighed against the capital required to assume and manage financial risks. South African prudential regulation is consequently directed at the management of these risks by deposit-taking institutions. However, where prudential regulations and supervision have failed to bring about effective risk-management by a banking institution, undue risk exposure may cause a bank to fail. This triggers various forms of protective regulation which are discussed below.

9.3.1 Crisis Management

9.3.1.1 Emergency Liquidity Assistance

Stals (1994: 2) argues that conventional operational instruments used by central banks for macro-economic objectives, such as open market operations, accommodation to banking institutions at the discount window and interest rate policy should not be used for micro-economic objectives as this would undermine the objective of financial stability. In order to overcome this problem, Stals (1994: 5) notes that central banks often introduce special lender of last resort facilities that can be implemented to provide special assistance to individual institutions in specific circumstances. However, Stals (1994: 5) stresses that such lender of last resort assistance should be applied with great circumspection for reasons such as transparency or objective criteria. As Stals (1994: 5-6) states, the disclosure that a specific banking institution is dependent on special bank assistance for its survival 'could indeed be a kiss of death that could force the institution into liquidation'.

As regards objective criteria, Stals (1994: 6) reiterated the stance of the South African Reserve Bank that it will 'only provide special assistance to a bank to bridge a temporary liquidity problem, where there is a reasonable chance that the bank can recover from its ailment in a relatively short period of time, and **where its demise poses a threat to the banking system as a whole**'.

While it is the role of the bank regulatory authorities to combine the objectives of the central bank of maintaining overall financial stability with the objective of providing security for the individual institution and its clients, Stals (1994: 7) warns that:

> *'despite all the precautions taken by the bank regulators and supervisors in the world, working closely with the central bankers of their countries, security for depositors cannot be guaranteed by the monetary authorities. Each depositor must therefore carry his own responsibility for his own decisions of and where and how his money and his savings will be invested'.*

Indeed, the South African Reserve Bank has often allowed banks to fail or be taken over by other banks.[357]

The most widely publicised case of South African Reserve Bank assistance relates to the Bankorp group. In 1985 Bankorp approached the South African Reserve Bank with a request for special assistance to enable it to cope with bad investments and other non-performing assets inherited with the take-over of Trust Bank in 1977 and Mercabank in 1984. The year 1985 was extremely difficult for South Africa due to international sanctions, trade boycotts, disinvestment campaigns and international loan withdrawals which put severe pressure on the balance of payments and the external value of the rand. In the process a domestic liquidity squeeze adversely affected the banking sector and exposed the weaker banks.

Against the background of the debt moratorium and the declining creditworthiness of South Africa in the international credit markets, a domestic banking crisis would have had serious systemic repercussions. In the judgement of the monetary authorities, the potential failure of Bankorp, one of the major banks with extensive international relations (Stals 1996 (b): 18-19), created a serious threat of systemic contagion.

Consequently, the South African Reserve Bank provided Bankorp with a low interest-rate loan of R 200 million in April 1985 which was increased to R 300 million in April 1985. When in 1990 it emerged that Bankorp was unable to repay the first instalment of the loan an extensive investigation into the bank was launched. As Stals (1996 (b): 21-22) submits:

> *'the picture that emerged ... was rather desperate. Bankorp made no profit during the 1989-1990 financial year, and only about 32 per cent of the bank's total assets at that stage were profitable'*

The South African Reserve Bank, faced with the decision of providing further assistance or closing down Bankorp, decided to increase the lender of last resort loan to Bankorp from R 300 million to R 1 000 million. This decision was based on the fact that the economy was at the time in a recession and the liquidation of Bankorp would have adversely affected not only other banks and depositors, but would also have forced the liquidation of many debtor clients of the bank (Stals 1996 (b): 22). Moreover, the group had a foreign presence in London, New York and Hong Kong and a domino effect on the creditworthiness of other South African banks in the international sphere was of concern.

In June 1991 the external auditors of Bankorp informed the South African Reserve Bank that the income of about R 150 million generated by the support package was not sufficient to salvage Bankorp which had since further deteriorated. After extensive negotiations, it was agreed that the shareholders of Bankorp would have

---

[357] Broadway (1994: 122-123) lists the various bank failures in South Africa during the period 1972 - 1993: These are Clanwilliam Eksekuteurshamer Beperk (1973); UDC Bank Limited (1978); Rand Bank Limited (1980); Rondalia Bank Limited (1980); Breda Bank Limited (1978); Spes Bona Bank Limited (1978); Concorde Bank Limited (1980); Alpha Bank Limited (1990); Cape Investment Bank Limited (1991) and Pretoria Bank Limited (1991).

to cover approximately R 800 million of the potential loss and the South African Reserve Bank loan would be increased to R 1 500 million. The latter would enable the bank, through the income earned on an investment in government stock, to generate approximately R 1 125 million over a period of five years, which would be applied towards the write-off of accumulated losses. The substance of the 1991 agreement was not affected by amendments made in 1994 when ABSA took over Bankorp. On 25 October 1995 the accumulated total of R 1 125 million in financial assistance was reached and the South African Reserve Bank loan of R 1 500 million to Bankorp / ABSA was fully repaid.[358]

The above case has provided the clearest policy formulation of the South African Reserve Bank stance regarding support for failing banks and is therefore worth quoting at length. As Stals (1996(b): 13-14) commented:

> *'Some general rules can be derived from the practices followed universally by central banks:*
>
> - *Firstly, financial assistance is applied very sparingly, and as a general rule only when a particular case provides a threat of contagion of the whole banking system.*
>
> - *Secondly, protection of depositors is a major consideration that must be taken into account, especially by central banks that have to operate in a vacuum where there is no public systems of depositor protection.*
>
> - *Thirdly, confidence in the banking system must be preserved, without providing open-ended support for mismanagement, fraud or internal inefficiencies in banking institutions.*
>
> - *Fourthly, arising from the foregoing, financial assistance emanating from the central bank / government must, as far as possible, serve to protect depositors and not shareholders of banking institutions.*
>
> - *Fifthly, in order to assist the banking institution to overcome its problem, the central bank may provide a loan at a nominal rate of interest , or perhaps provide guarantees for raising low interest rate loans from other institutions.*

---

[358] The assistance rendered to Bankorp and later the ABSA group has been widely publicised (and often criticised) in the popular financial press. It is submitted that much of the criticism stems from a lack of understanding of the aim of such emergency measures by a central bank. The supportive actions taken by the South African Reserve Bank are justified as the failure of Bankorp certainly posed a risk to the stability of the domestic financial system. Moreover, considerations of depositor protection (in the absence of a formal deposit protection arrangement) favoured such assistance. Finally, the fact that the assistance was not disclosed at the time is understandable as public confidence had to be maintained in the bank despite its previously disastrous risk-management practices. Although the costs of such assistance is known it is obviously difficult to quantify the benefit (i.e. avoidance of losses which would have been suffered had the banking group been allowed to fail). Nevertheless, it would appear that measures were worthwhile from a cost-benefit point of view as ABSA is presently the largest South African banking group in terms of bank assets and is in sound financial health.

- *Sixthly, the assistance must be conditional upon remedial action that will lead to recovery and may often require a change of ownership, of senior management, and even of the structure of the affected institution.*

- *Seventhly, there must be possible exit for the central bank from the assistance programme, perhaps only after credibility, credit-worthiness and public trust in the institution have been re-established.*

- *Eighthly, it may in certain circumstances be necessary to keep the assistance package secret, particularly if disclosure could be counter-productive and defeat the objective of the exercise.*'

These are generally the considerations that the South African Reserve Bank applied in providing assistance to South African deposit-taking institutions.

Finally, Oelkers (1995) considered the question of liability in banking supervision and rescue operations with reference to existing South African law. Oelkers (1995: 150) concludes that 'liability in banking supervision does not direct the right way to solving the problems that exist between the depositors and their bank'. Oelkers (1995: 149) furthermore argues that: 'from the point of view of (social) justice and equity the situation in banking supervision remains unsatisfactory. The depositors are not protected from loss. The State does not take responsibility'. Accordingly, Oelkers (1995: 149) raises the possibility that an answer to the problem of unprotected depositors may be deposit protection schemes or deposit insurance.[359]

9.3.1.2 Corrective Action

Curatorship

Section 69 provides for the appointment of a curator if it is the opinion of the Registrar that a bank is experiencing financial difficulties.[360] A curator may be granted extensive powers to intervene in the risk-management of a bank, such as:

- suspending or reducing the rights of creditors;
- making payments to creditors as he sees fit;
- cancelling any agreements between the bank and any other party;
- grant loans or extend a facility
- cancel leases of movable or immovable property; and
- dispose of any assets of the bank.

Section 69A furthermore permits the Registrar to appoint a person to investigate the affairs of a bank under curatorship.

---

[359] This is discussed in paragraph 9.3.1.3 below.

[360] During 1996 the Community Bank failed as it was unable to fund its growing asset portfolio. The Community Bank was placed under curatorship and the curator was, at the time of writing, considering various offers made by potential purchasers (Financial Mail 1996(b): 32).

Powers of the Registrar

The Registrar can restrict[361] the deposit-taking institution's activities where the deposit-taking institution: has, or any of its directors or executive officers have, been convicted of an offence in terms of the Act; does not carry on satisfactorily the business of a deposit-taking institution; has failed to comply with an applicable requirement of the Act;[362] continues to employ an undesirable practice; or has in a material respect misrepresented the facilities which it offers to the general public.

The Registrar can immediately take legal action by way of criminal proceedings and / or impose a fine based on a percentage of the shortfall for each day that the failure or inability to meet the requirement exists. The percentage fine imposed depends on the infringement and is set out more fully in the Act.

The Registrar has the authority to condone such failure or inability and to give the institution concerned an opportunity, subject to predetermined conditions, to comply with the relevant provision / requirement.

Process followed

The perspective of the Bank Supervision Department of the South African Reserve Bank is that a supervisor cannot prevent bank failure. Instead, it is regarded as a sign of a properly functioning banking system that both free entry and free exit can take place. According to Oosthuizen (1994(b)) the supervisor's role regarding bank failure should consist of the following actions:

- early detection of distress;
- assess systemic risk potential;
- involving appropriate players;
- keeping the Governor[363] advised throughout;
- if a third party becomes involved, insist on an independent, due diligence investigation;
- if all else fails, trigger the above statutory problem resolution mechanisms.

Accordingly, Oosthuizen (1994(b)) argues that the supervisor should not become involved in a private sector resolution of distress and that the first prize is a **market based solution**.

However, should it become necessary to decide whether a failed bank should be bailed out by the South African Reserve Bank, the Bank Supervision Department would firstly insist on a due diligence and solvency examination in which an

---

[361] Instead of applying to a court for cancellation of permission to conduct banking business under Section 25(1) of the Act.

[362] As soon as a deposit-taking institution fails to or is unable to comply with the prudential requirements of this Act, it must immediately report this fact to the Registrar giving reasons (Section 74).

[363] It is assumed that the Governor would, in turn, keep the Minister of Finance fully informed.

independent specialist performs an investigation to verify the facts as presented by the failed bank.

The stages of the process would be that the Bank Supervision Department would identify the situation and advise the Governor thereof. The Governor would then assess the situation and determine his advice to the government. Ultimately, the decision on whether to assist a failed or failing bank is a political decision to be made by the government in conjunction with the South African Reserve Bank (Oosthuizen 1994(b)).

Should assistance be approved, the format of the assistance would be a recapitalisation by means of a direct transfer without a quid pro quo, a low interest loan or a rights issue taken up by the South African Reserve Bank. The latter possibility is not favoured as it is not in the South African view a function of a central bank to be an equity participant in another bank.

The South African Reserve Bank would insist on the management being replaced as a pre-requisite to providing assistance.[364]

Oosthuizen (1994(b)) concedes that the implication of assisting a failed bank is that of subsidising a less efficient institution, undermining the efficiency of the banking system in the interest of financial stability, creating an unlevel playing field and undermining the risk versus reward equation. Consequently, the following parameters are utilised in arriving at a decision: the risk profile of the bank and the probability of receiving a return on the funds utilised to assist the bank; the effect on inflation if the assistance causes monetary expansion; the direct or indirect cost to the taxpayer; systemic stability, efficiency and consumer protection.

As bank regulation and supervision amounts to intervention in banking activity, these are subject to moral hazard which may lead to an expectation gap between what the South African Reserve Bank could, should and should not do. Oosthuizen (1994(b)) therefore proposes an alignment of supervisory structures with the objectives of regulation as shown below:

Regulatory Objective	**Supervisory Structure**
Stability	Systemic Risk Unit[365]
Efficiency	Bank Supervision
	Financial Services Board
Consumer Protection	Deposit Insurance Corporation

[364] In the case of Bankorp this did not occur as the losses were suffered by the newly acquired Trust Bank and Mercabank. It was left to the new managing director of Bankorp, Piet Liebenberg to rectify the mismanagement of his predecessors.

[365] It is assumed that one of the prime functions of such a systemic risk unit would be to maintain the integrity of the payments mechanism.

Example

The most recent bank failure in South Africa was that of African Bank,[366] for which a rescue package was put together by NBS in partnership with New Africa Investments and Metropolitan Life, in October 1995. A due diligence investigation had revealed that African Bank suffered from chronic mismanagement problems despite fundamentally sound information and other systems. Arrear payments had not been collected for at least six months prior to African Bank's slide into curatorship, while several key management members - including the financial manager who had resigned in mid 1994 - had not been replaced. Many of the staff were unable to operate the bank's systems (Vermeulen 1995).

These deficiencies in African Bank's risk-management capabilities reflect less favourably on the prudential supervision of the Reserve Bank who arguably did not make full use of the corrective measures at their disposal. However, it was possible that information had been suppressed or not fully disclosed or that appropriate corrective measures were politically sensitive. Ultimately, the decision by the Reserve Bank not to support the failed African Bank was theoretically sound as it did not pose any risk to the stability of the South African banking system.

However, the subsequent actions by the South African government cannot be justified on prudential grounds. In 1996 an assistance package was unveiled which entailed that the government would take up a 20 per cent stake in the bank by expending up to R262 million of public money to cover its bad debts. The then Minister of Finance, Chris Liebenberg, justified the state's assistance on the grounds that bids by the rescue parties (in particular NBS Holdings) were submitted on condition of significant government help. The government also stated its intention of distributing its shareholding in time to facilitate further black economic empowerment. Moreover, strong social, economic and practical factors had led government to believe that aid to facilitate the bank's rescue would be justified. Finally, it was also said to be a commercial decision as the government could have lost R262 million held in deposits with the bank, had it been allowed to go into liquidation (Vermeulen 1995).

The issues surrounding the assistance rendered to the African Bank have important regulatory repercussions.

First, it is clear that the rescue package was a political decision made at cabinet level and that taxpayers money was used for this purpose. While the South African Reserve Bank has in the past rescued a number of banks, this never occurred at the direct expense of the taxpayer. It is conceded that the cost of assistance rendered to failing banks by the South African Reserve Bank would have impacted indirectly on the fiscus as all profits accruing to the South African Reserve Bank above a certain level is paid over to the government. This leads to another observation: in the case of bank failure there is always a cost, the only consideration is who assumes

[366] Interestingly, African Bank was rescued once before, in 1985.

responsibility: depositors, shareholders, the central bank, a deposit insurance fund or the government. In the case of African Bank it is not prudentially sound that taxpayers had to suffer the consequences of bank failure.

Despite assurances to the contrary, the assistance package to African Bank could not have been based on commercial considerations otherwise the funds required would have been forthcoming from the private sector. As it were, the private sector would not be drawn into African Bank without government enticement.

Second, the assistance rendered was selective in nature as state deposits were not written off while those monies owed to several municipalities had to be forfeited. Admittedly, the typical depositors in African Bank were not necessarily seeking the highest return, unlike depositors in other small banks. While those who placed funds in Prima, Alpha and Pretoria banks were relatively sophisticated investors attracted by higher interest rates, many of African Bank's depositors were insensitive to interest rates (Financial Mail 1995(a): 36). Yet the protection of these individuals who supplied *circa* a third of total deposits of more that R 600 million does not warrant the protection afforded to state deposits.

Thirdly, the collapse of African Bank did not pose any risk to the banking system[367] which is the main criterion for a rescue by the South African Reserve Bank.

The conclusion is that the assistance provided in the case of African Bank can only be justified prudentially on account of consumer protection. However, as will be argued in the following paragraph, consumer protection should rather occur by means of explicit deposit protection than by South African Reserve Bank support.

9.3.2 Deposit Insurance

South Africa has no formal deposit insurance scheme. After the collapse of a few small banking institutions in 1977, serious consideration was given to the institution of a mandatory deposit insurance scheme in South Africa. In view of the strong opposition this proposal encountered from the five big banking groups, who agreed that such a scheme would raise the cost of banking and also in practice result in the big banks subsidising smaller banks, the efforts were discontinued (Jacobs 1983:5). In effect the *de facto* non-discretionary application of emergency assistance measures by the Reserve Bank to banks experiencing liquidity and / or solvency problems prior to the passing of the 1990 Banks Act, also obviated the need for a formal deposit insurance arrangement as there was a high probability that banks would be rescued and hence depositors protected.

Three arguments against deposit insurance in South Africa were submitted to the De Kock Commission (Republic of South Africa 1984: 56) namely: that the limited number of banks in South Africa would make it difficult to operate such a system on a sound actuarial basis; that large and secure banks would feel themselves unfairly

[367] The monthly DI 900 returns for July 1995 for African Bank show no inter-bank funding, which is incidentally similar to its previous insolvency in 1985.

burdened with having to make insurance contributions towards the safety of deposits held with less secure institutions; and that 'group formation' amongst banks had further reduced the need and basis for a deposit insurance system.

Other objections to deposit insurance in a South African context are the following (Hudgson 1994: 9-10): that the cost will be passed on to the client which will further increase the cost of banking; and that compulsory deposit insurance will lead to a decline in lending standards in the pursuit of profits, as the fiduciary duty owed to depositors has been eliminated.

However, as was established in paragraph 4.3.2, deposit insurance is a feature of nearly all developed financial systems.[368] Moreover, many of the objections listed above would fall away under a system of deposit insurance based on risk-related premiums. Finally, and probably most important, is the existence of a large number of unsophisticated depositors in the South African financial system, all of whom clearly need to be protected in some way or another. Most of the general public is incapable of assessing the risk quality of the bank they use, due to insufficient information being available to them or an insufficient ability to make such an assessment.[369]

As a result of comments and requests received from various parties, the Banking Supervision Department hosted a workshop on Investor Protection in South Africa in September 1994, attended by the writer. The objectives of the workshop were to:

- open the debate on deposit insurance.
- identify the strategic issues to be addressed in setting up and operating such a scheme, should it be deemed desirable to do so; alternatively, to identify the strategic issues to be addressed should it not be deemed desirable to set up and operate such a scheme.
- set up a working committee, whose task would be to pursue and bring to finality any matters that may need to be resolved subsequently to the workshop.

The following pertinent questions posed by Stals (1994: 9) served as a broad guideline to the committee, which had to report back to the South African Reserve Bank, the Council for Southern African Bankers and the FSB.

- who should run and manage and own the scheme?
- what role should Government or its agencies (the Registrar of Banks and the Reserve Bank, for example) play in funding and managing the scheme?

---

[368] Interestingly, De Swardt (1987: 12) in 1987 again mooted that deposit insurance should be considered as an alternative to financial support by the central bank.

[369] Stals (1994: 7-8) admits that many small depositors have neither the skills nor the information required to judge the riskiness of banks' activities. It is therefore reasoned that 'given the fact that neither the central bank nor the bank regulatory and supervisory officers can provide adequate protection for small depositors, and accepting the importance of maintaining trust and confidence in the banking system, the need arises for some additional protection scheme for depositors'.

- how will the scheme in total be funded, or, in other words, who shall pay for the scheme? What contribution, if any, will come from depositors themselves, and from the participating banking institutions?
- should depositor protection be optional or compulsory?
- what amounts should be covered? Should both large and small deposits be included and what limits should be set for the liability of the fund?
- what effect will depositor insurance have on the maintenance of sound norms and standards in the banking system?

Not all interested parties were adequately represented at the workshop. It was therefore decided that a committee should be appointed to undertake an in-depth investigation of the issue, with a view to formulating proposals and recommendations. The Bank Supervision Department was tasked with establishing such a committee.[370]

At the Committee's first meeting on 9 November 1994, it was agreed that more parties would have to be consulted on the issue. Organisations such as the National Economic, Development and Labour Council (commonly known as 'Nedlac') and the Standing Committee on Finance of Parliament would be invited to act as observers and to take part in the discussion.

It was resolved that the Committee would focus on the protection of deposits at banks and mutual banks, as defined in the Banks Act, 1990, and the Mutual Banks Act, 1993. A recommendation was also made to the Policy Board for Financial Services and Regulation that the Policy Board investigate protection measures for investors in financial institutions other than banks and in emerging financial markets.

In the second half of 1995 the committee submitted a report to the Policy Board, containing the following summarised recommendations (South African Reserve Bank 1995(a): 17-18):

- 'The committee is not in favour of an exclusive deposit protection scheme for banks only, but recommends that the protection scheme include all financial institutions.
- The acceptance and implementation of an investor protection scheme should not further distort the already unlevel playing fields between the various financial institutions.
- Careful consideration should be given to the level at which protection could be introduced, for example, on a preventative level through more supervision; or on a reactive level, by means, of an explicit investor protection scheme.'

The committee recommendation of a protection scheme for all financial institutions is theoretically unsound as all financial institutions do not display the unique

---

[370] The following parties are represented on the Working Committee on an Investor Protection Scheme for South Africa: The banking sector (through the Council of Southern African Bankers); South African Reserve Bank; Department of Finance; Financial Services Board; Life Offices' Association of South Africa; The South African Insurance Association; South African Insurance Brokers Association; and public-interest bodies.

characteristics of banks.[371] In particular, financial institutions other than banks do not provide payment services, do not (with the exception of life assurers) serve as a major depository for the public's savings, and do not have a similar propensity to cause financial instability. It is difficult to conceive how a financial industry wide protection scheme could operate in a competitively neutral manner. This would require making provision for the differing risks attached to the various types of financial institutions, each with differing arrays of financial products and services. In this respect the first and second recommendations of the committee are conflicting.

Moreover, the nature of the modern financial system is such that it encompasses an extremely wide range of financial institutions catering for an equally broad spectrum of consumer needs. It is questionable whether consumers on either polar end of this range would welcome protection.[372] It is proposed that banks who (by virtue of the legal nature of a deposit) guarantee repayment to the members of the general public and are uniquely incentivised to assume risk, should be the sole subject of a protection scheme.[373]

On a practical level, deposit protection schemes are a feature of most modern financial systems whereas evidence of a scheme for all financial institutions, as envisaged by the committee, could not be found in any comparable countries.

Consequently, it is recommended that the regulatory authorities apply greater pressure to the arguably resistant South African banking industry to implement a deposit-protection scheme. In line with the regulatory goal of consumer protection, such a scheme should only cover the smaller and unsophisticated investor (i.e. it should provide for maximum levels of protection). Finally, deposit insurance should be funded by risk-related premiums which take explicit cognisance of the risk-profile of each bank.

---

[371] See paragraph 2.3 for a full discussion of these characteristics.

[372] For example it can be argued that such protection is inapproprate for members of a stokvel and investors in a hedge fund alike. The former are attracted by the simplicity of such schemes whereas the latter have an appetite for high risk. Either way consumers have made sovereign decisions to accept the risk involved.

[373] In the case of insurance products the consumer carries the performance risk of the insurance/investment products. This is not the case for deposits.

9.4. Monetary Requirements

9.4.1 Variations in Reserve Asset Requirements

Minimum reserve requirements were included in the Banks Act of 1965 and 1990 for prudential purposes. Since the regulatory authority could no longer justify the need for such a requirement in the legislation administered by them, they proposed that the minimum reserve requirement should rather be included in the South African Reserve Bank Act (Van Greuning 1993: 263).

In the first quarter of 1993, section 71 of the Banks Act, regarding the minimum reserve balance requirements relating to banks, was repealed and incorporated into the South African Reserve Bank Act (1989), in order to reflect the monetary-policy nature of this policy instrument (South African Reserve Bank 1993(b) : 13).

The Reserve Bank regards the variable cash-reserve requirement as a useful instrument of monetary policy, although the significance thereof has diminished because of the employment of more flexible open-market policies.

Cash reserves include the total amount of bank notes and coins in bank vaults as well as deposits with the Reserve Bank.[374] As from 21 March 1995, the basic minimum reserve requirement was increased from 1 per cent to 2 per cent of the defined total liabilities of each banking institution. A supplementary minimum cash-reserve requirement of 1 per cent of all liabilities to the public exists, on which a market-related interest rate is paid by the Reserve Bank (South African Reserve Bank 1995(b): 25).

Van Greuning (1993: 265-266) argues that the possibility of applying the minimum reserve requirement to the growth in credit extension (asset side of the balance sheet), rather than to liabilities should be considered, despite the fact that the international trend does not support this approach.[375] Van Greuning (1993: 265-266) states that the implications of such an approach would be:

- the minimum reserve requirement would be clearly identified as a monetary policy instrument.
- the minimum reserve requirement would perform a 'credit limiting' or absorption function.

---

[374] The basis for the calculation of the required reserve balance was changed to phase out certain deductions allowed in respect of repurchase agreements. During the third quarter of 1993, the majority of such deductions were reintroduced, so as to level the playing-fields between banks and non-bank securities dealers, until such time as legislation detailing prudential requirements for securities trading activities are finalised (South African Reserve Bank 1993(b): 13).

[375] This approach is similar to the UK corset which was abolished in 1980. See table 7.5.

9.4.2 Interest Rate Controls

Brümmerhof (1988: 55-61) covers the history of deposit and lending interest rate controls in South Africa. In March 1980 interest rate controls on deposits were finally abolished. Limitations on interest rates charged for certain credit transactions are still in existence, yet these are not an instrument of monetary policy but rather have the objective of preventing the exploitation of borrowers.

While the Banks Act contains comprehensive prescriptions regarding deposits and the business of deposit-taking, the Act contains little by way of prescription regarding banks' lending activities. Certain aspects of banks' lending activities are, however, regulated by the Usury Act, (Act 73 of 1969) and by the Credit Agreements Act, (Act 75 of 1980).

The Usury Act, (Act 73 of 1969) provides for the limitation and disclosure of finance charges levied in respect of money lending transactions, credit transactions and leasing transactions and for matters incidental thereto.[376]

The Credit Agreements Act, (Act 75 of 1980) provides for the regulation of certain transactions in terms of which movable goods are purchased on credit, or certain services are rendered on credit, and for incidental matters.

9.4.3 Credit Ceilings

Brümmerhof (1988: 52-55) relates the history of quantitative restrictions on credit extension. This form of direct monetary control was implemented for the first time in South Africa on 1 November 1965. In November 1972 all credit ceilings were abolished and replaced by higher cash-reserve and liquid-asset requirements. On 1 January 1976 a dual set of credit ceilings was announced; viz a ceiling for loans and acceptances to the private sector and a ceiling for banks' investment in paper issued by the private sector (excluding banks). The administration of these credit ceilings

---

[376] More specifically, some of the matters dealt with in the Act are as follows (Kelly 1993: 284): maximum annual finance charge rates which may be charged in connection with a money lending transaction, a credit transaction and a leasing transaction; limitation of finance charges in respect of money lending transactions secured by certain mortgage bonds; limitation of finance charge rate at conclusion of contract; compulsory disclosure of finance charges; particulars in instrument of debt relating to payment of outstanding principal debt and finance charges before due date; limitation of sum recoverable on default or deferment of payment; sum recoverable on expiry of period of notice by money lender, credit grantor or lessor; limitation of sum recoverable from borrower, credit receiver or lessee; reduction of instalments in the event of advance payments, refinancing or consolidation of debt; payment of portion of principal debt and finance charges before due date; consequence of notice relating to payment before the due date of outstanding principal debt and finance charges in terms of certain money lending transactions or credit transactions; position regarding recovery of additional finance charges and other costs; recovery of amount overpaid in connection with money lending transaction, credit transaction and leasing transaction; position of bona fide holder of instrument of debt; money lender, credit grantor or lessor to furnish borrower, credit receiver or lessee with copy of instrument of debt and with certain information; legal proceedings for recovery of debt incurred in connection with a money lending transaction, a credit transaction or a leasing transaction; and legal proceedings for recovery of costs of repair or maintenance of leased property.

became increasingly cumbersome over time (Republic of South Africa 1984: 233-234), and led to increased disintermediation. With effect from 1 September 1980 all credit ceilings in South Africa were abolished.

9.4.4 Credit Allocation by Regulation

In line with the general market-orientated monetary policy measures, the use of credit allocation by regulation is not favoured in South Africa. Certain prescribed investments for banks were phased out in 1986.

There have been some unsuccessful efforts to implement prescriptive legislation which would require banks to disclose how credit is granted on a racial, geographical and gender basis. The draft proposal required banks to provide rejected applicants with written reasons for non-approval. It was claimed that the legislation would not require banks to make loans which do not fit with sound risk criteria and that client confidentiality would be guarded.[377] This particular proposal was never pursued. However, there is still pressure on banks to provide financial services to poorer sections of the community. As the nature of these services, especially as far as credit extension is concerned, entails higher risks, this may still become a sensitive and problematic issue.

Such proposals have drawn strong criticism from the banking industry, as is evident from an article by Piet Liebenberg (1994) the Chief Executive of the Council of Southern African Bankers entitled 'A future financed by unpayable debt is / are built on sand'. The thrust of the argument is that banks do not discriminate on race but rather on risk. As Liebenberg (1994) puts it:

> *'A bank lends to creditworthy customers, taking into account their ability to service and repay debt and the availability of acceptable security. In other words, it discriminates purely on commercial grounds. That is the essence of risk-management'.*

Liebenberg (1994) continues by stating that 'pressure on banks to make loans and credit facilities available might not be frivolous or ill-intended, but it is dangerous. It obscures the deeper problem that bedevils much thinking concerning the development challenges facing South Africa namely the widespread belief that the quick and easy solution to our difficulties lies in individual ownership through incurring excessive private debt.'[378]

---

[377] The proposed legislation is similar to legislation enacted in the US in 1977. The Community Reinvestment Act was initially introduced to stop banks discriminating against people who live in certain geographical areas, particularly black inner-city areas.

[378] Liebenberg's (1994) point is well illustrated in the South African housing dilemma. The White Paper on a New Housing Policy and Strategy for South Africa estimates a housing backlog of 1,5 million units whereas an estimated 720 000 serviced sites in the urban areas require upgrading. As noted by Jacobs (1995), one of the positive features of the above White Paper is the proposals put forward to normalise the housing market for low income households, especially those desiring access to the credit markets for housing finance. Clearly, the housing problem can only be solved by co-operation and not coercion to reduce perceived risk. This is an example of a more general application of risk-management outside of the financial sphere.

9.5 Summary and Conclusion

The South African Reserve Bank's continuing supervision is conducted by means of the collection of returns, through the auditors' reports, and regular visits to and interviews with banks. The South African Reserve Bank does not attempt to unduly protect the banking system, or to prevent banks from making their own commercial decisions. The supervisors do not attempt to supplant a bank's management but have to be satisfied that the risks are adequately assessed and proper risk-management takes place

(Wiese 1991: 315).

Table 9.2 summarises the various components of prudential regulation in South Africa with regard to the respective risk issues.

Table 9.2 Prudential Regulation in South Africa

Component	Risk consideration
Entry requirements	• Licensing requires adequate financial means to support risk-taking and management to be fit and proper to manage risks • Initial capital requirement of R50 million is a relatively high barrier to entry
Foreign bank entry	• Foreign bank branches subject to the same risk requirements as domestic banks • No economic needs test applies
Ownership control	• A person may hold up to 49 per cent of a bank provided they are fit and proper to prevent undue influence on the risk-management of a bank
Permitted activities	• Banks may hold up to 49 per cent interest in insurers and may engage in securities activities via separately capitalised entities to prevent the contagion of risk to the bank
Permitted investments	• Investment limitations exist with respect to property and associates and are related to the bank's risk capital
Disclosure requirements	• Statutory returns specifically designed to address all the financial risks that make up overall risk-management for banks • Accounting standards have significantly improved the disclosure of financial information to enable users to gauge the risk-profile of banks
The role of auditors	• Internal auditors may (but are not required to) provide the Registrar with risk information • Audit committee provides additional internal but independent control to risk-management • Internal and external auditors have extensive responsibilities in the overall risk-management process
Capital adequacy	• BIS risk-weighted capital adequacy requirements with adaptation to local circumstances
Risk asset limits	• Large exposure limit is 25 per cent of bank capital and not the 15 per cent recommended by BIS • No country risk guidelines exist due to exchange control regulations • Interest rate risk, foreign exchange rate risk and off-balance sheet risks managed in relation to bank capital
Liquidity risk	• Liquidity risk-related to total liabilities to the public utilising an uncomplicated requirement

This Chapter, which has focused on banking regulation in South Africa, has clearly shown that the banking supervisory authorities have as their prime aim the achievement of effective risk-management by the supervised banks. This is attained

by an overall assessment of a bank's management expertise, the efficiency of its internal control systems, the management of individual financial risks and consequently, places great reliance on the role of auditors and the risk-related information generated by banking activities. These points comply with the research problem which asserts that the regulation of deposit-taking institutions reflect the realities of risk-management.

As Van Greuning (1993) notes, the acknowledgement that a regulator has a limited role to play in preventing bank failure, redirects the focus towards what the bank supervisor can realistically achieve - namely facilitating the optimisation of risk-management. In South Africa this is done by requiring statutory information from banks based on risk information that bank management can use in their banking activities. The aim of banking supervision in South Africa is the creation of an environment that optimises the quality and effectiveness of risk-management - and for bank supervisors to evaluate the risk-management within individual banks. Consequently the overall approach adopted by South African regulators is not only theoretically sound but also advanced by international standards.

Furthermore, the attitude of the South African Reserve Bank towards emergency assistance measures as iterated by Stals (1996(b)) is theoretically correct as it focuses on consumer protection and systemic stability, which are the main goals of financial regulation in the case of deposit-taking institutions. One area of concern was the assistance provided to the failed African Bank. Although considerations of depositor protection did play a role it appears as though the assistance was primarily motivated by social considerations which should not play a role in prudential policy.

Table 9.3 Protective Regulation in South Africa

Component	Risk consideration
Emergency assistance	• Only provided when bank failure presents a risk to the banking system • Protection of depositors is a major consideration as no public system exists • Secrecy may be necessary
Corrective action	• Curator may be appointed to take remedial action to improve the risk of a bank • Market based solution preferred but statutory problem resolution mechanism exists
Deposit insurance	• Existence of large number of unsophisticated investors indicate need for such a system in South Africa • Risk-related premiums would counter most objections to deposit insurance

One area of concern, however is the absence of any explicit means of depositor protection. This contrasts markedly with the UK which offers deposit protection on individual deposits up to £15 000[379] and Germany where banks offer depositors virtually unlimited protection.[380] It was argued that the findings of the Working

[379] See paragraph 7.3.2.

[380] See paragraph 8.3.2.

Committee on Investor Protection in South Africa do not provide a workable solution.[381]

Possible future changes in banking regulation are linked to the removal of remaining exchange control restrictions. This will impact on the current liberal requirements regarding loan concentration (as the concentrated nature of the South African economy changes over time) as well as the development of presently non-existent guidelines regarding country risk.

The absence of direct monetary requirements indicates the lesser reliance of monetary authorities on these methods of maintaining monetary stability and again reflect favourably on the South African regulator. Any political pressures towards the re-application of credit allocation by regulation cannot be justified on account of social considerations and should be rejected on prudential grounds.

[381] Very little evidence of research into deposit insurance in a South African context could be found. Steward (1993) discusses investor protection in a general public policy framework. The academic impulse is to require more research into this area. However, as the African Bank example has demonstrated, the absence of such a system is already tainting the supervisory system. Further research, should be conducted expeditiously and implemented with greater vigour by regulatory authorities themselves.

CHAPTER 10

AN ANALYSIS OF THE REGULATION OF DEPOSIT-TAKING INSTITUTIONS WITH REFERENCE TO SELECTED FINANCIAL SYSTEMS

10.1 Introduction

This concluding Chapter weaves together the multiple threads of fact and reason presented in all of the preceding Chapters. As such it is appropriate to revisit the research problem and general framework which served as *leitmotiv* throughout this study.

It was clearly demonstrated that the regulation of deposit-taking institutions in all three the selected financial systems undeniably conforms to the research problem. Accordingly, the risk-management approach to banking regulation is the subject of the first section of this chapter. The discussion covers the rationale and the principles of financial regulation as well as the application thereof by regulatory authorities.

Second, the main conclusions derived from applying the risk-management approach to prudential regulation in the UK, Germany and South Africa are presented.

Third, the main risk-considerations underlying the protective regulatory arrangements in all three systems are summarised and the South African deficiencies in this regard pointed out.

Fourth, the monetary requirements which may hamper the implementation of risk-based regulations are analysed. This section indicates that regulators have generally steered clear from this mode of regulation.

Fifth, the risk-management model is fitted to the South African deposit-taking regulatory framework. A number of improvements to overall financial regulation are suggested. The dissertation ends with a conclusion and general recommendation.

10.2 Consideration of Major Issues

10.2.1 Rationale of Financial Regulation - Risk-management

> *'Risk-management is not a modern invention. The Old Testament tells the story of the Egyptian Pharaoh who dreamed that seven healthy cattle were devoured by seven sickly cattle and that seven healthy ears of corn were devoured by seven sickly ears of corn. Puzzled by the dream, Pharaoh called on Joseph to interpret it. According to Joseph, the dream foretold seven years of plenty followed by seven years of famine. To hedge against that risk, Pharaoh bought and stored large quantities of corn. Egypt prospered during the famine, Joseph became the second most powerful man in Egypt, the Hebrews followed him there, and the rest is history.'*
>
> Froot *et al* (1994: 91).

Existing approaches to financial regulation have not adapted adequately to the realities of modern deposit-taking financial intermediation. While a host of explanations exist, each covering a unique aspect of banking, none of these are singularly convincing as a justification for the complex system of regulation existing in modern banking systems globally. For example, the outdated approach which holds that protective / preventative regulation exists to counteract the possibility of a run-induced bank collapse, fails to include the multitude of other risks run by, actively managed by, and (in extreme cases) even caused by banks today. Prompted by significant changes which occurred in financial systems across the globe, banks and regulatory authorities have developed and implemented a new approach to deposit-taking intermediation and the regulation thereof.

The research problem developed in this dissertation holds that modern banking practice amounts to the management of a series of financial risks. Regulatory authorities - aware of the unique role of banks in the financial system - strive to keep the risk exposure of individual banks within acceptable limits. These regulatory actions decrease the possibility of individual bank failure which in turn decreases the probability of systemic financial failure. Prudential regulation is concerned primarily with the former, while the pro-active support functions of regulatory authorities are aimed mostly at the latter. The risk-management approach to banking regulation does not disprove existing financial theory, rather, it can be usefully employed to marry existing theories of banking regulation.

The research problem of banking regulation based on risk management was applied in three selected financial systems. In each case the basis for regulation and the manner in which the various financial risks are regulated in each financial system were discussed. While some regulatory differences continue to exist it is theoretically pleasing that implementation of the BIS proposals have resulted in a remarkable degree of regulatory convergence across financial systems. This has reduced significantly the incentives for cross-border regulatory arbitrage. More importantly, the BIS standards have generally brought an even greater risk awareness to regulatory frameworks. Nevertheless, the historical risk-orientation of banking legislation cannot be denied. In the German instance, the central banking legislation is to this day based on an act passed in 1934.

In each of the financial systems examined, the various financial risks are quantified and measured against the capital 'cushion' of a bank. This is done to ensure that the overall risk-exposure of a given bank is not excessive. Various bank asset classes are accorded certain risk-weightings which, when aggregated, and viewed relative to a bank's capital, are used to derive a risk-weighted capital adequacy ratio. The use of this ratio, although of necessity somewhat simplistic, is the prime indicator of the risk exposure of any given individual bank in all three systems.

It is not only banking regulators who are concerned with the risk-management activities of banks. In the face of increasingly intense competitive pressures, banks themselves are continually improving risk-management techniques in order to optimise their own risk-return relationships. Indeed, the internal risk-management rules and procedures employed by the banks themselves today, may often be far superior to those required by regulators. Superior risk-management is viewed as a competitive advantage by banks. The future for the regulator will be to steer the difficult course between the opposing beacons of standardised (but simplified) and sophisticated (but complex) risk-management regulation.

10.2.2 Principles of Financial Regulation

10.2.2.1 Efficiency

Once it has been established that banking regulation is intended to prevent banks from taking excessive financial risks, the question as to the most efficient means of regulation becomes paramount. The '**risk-management approach to banking regulation**' serves to illuminate various advantages, but also certain inefficiencies of modern regulatory frameworks. The major inefficiency of the relatively simplistic risk regulations imposed is inadequate measurement of true risk. The following aspects impact negatively on the efficiency of risk-regulation: definition of risk measures; imperfect measure of credit risk; portfolio considerations; risk-return considerations; and off-balance sheet items.

Definition of risk measures

Regulation based on risk-management should measure and control all the risks inherent in modern banking. Risk-management should entail the measurement of interactions, defined as co-variances among the different types of risk and their combined input on a bank's overall risk-profile. The main disadvantage of a more accurate but inevitably more complex measurement of risk lies in the standardised application of such a measure to financial institutions with differing characteristics and varying degrees of sophistication.[382]

---

[382] Although such a measure may be difficult to obtain, the US Investment Bank JP Morgan has made freely available its version of a market risk-management package called Riskmetrics™ (1994) which may generally assist in the standardisation of market risk-management processes of banks. This product which is the result of a great deal of practical and statistical research is inevitably much more complex than the simplistic approach adopted by regulators, yet it utilises a set of consistently calculated volatilities and correlation forecasts for input application to estimate market risks.

Generally, individual banks will not readily part with their superior techniques for measuring risk. It will therefore be the responsibility of the BIS as well as domestic regulators to strive for improved assessment of risk. A great deal of further quantitative research in this field is required.

Imperfect measure of credit risk

The regulators in all the countries surveyed made little formal distinction between the classes of creditworthiness of borrowers. Thus, all three regulators employ a 100 per cent risk-weighting for general loans although the default probability of the borrowers may vary considerably.[383]

Portfolio considerations

Regulatory risk-management techniques ignore the interaction of different assets in banks' portfolios. Expressed in micro-economic terms, the risk of a particular asset should be measured by its marginal contribution to the risk of total assets. Regulators treat a highly diversified and consequently less risky loan portfolio similarly to a portfolio of loans concentrated in one industry or region.

Risk-return considerations

The probability of bank failure depends not only on its risk-profile but also on the returns associated with that risk. Existing regulatory approaches focus primarily on risk and tend to neglect the profitability criterion. Banks engaged in high risk activities do so in the expectancy of higher returns, which may serve as a cushion against future losses. In certain instances a bank's high risk-profile may actually reduce the probability of bank failure.

It was postulated at the outset that banking activity inherently entails the management of risks. The true test is therefore to measure whether a bank's risk-profile is commensurate with its returns.[384] Capital adequacy only relates to this consideration in so far as historic returns have improved a bank's capital position.

Off-balance sheet items

Based on BIS proposals, all the regulators surveyed have, to a greater or lesser degree, incorporated the risks associated with off-balance sheet items in their

---

Consequently, this package is capable of being utilised as a common framework for measuring market risks. Similar risk frameworks need to be developed for other financial risks.

[383] For instance, the probability that Anglo-American Corporation will default on its loan obligations is infinitely smaller than the credit risk attached to Michael Jordaan (who should not qualify for a loan in excess of R 10). Nevertheless, loan obligations to either of these two parties result in similar capital requirements.

[384] The classic insurance adage - there are no bad risks, only bad premiums - is instructive in this regard. It is permissible for banks to engage in high risk activities provided that the risk is priced correctly.

banking regulations. However, in a financial world progressively exposed to derivative financial instruments, these are regarded as increasingly inadequate. Historically, the main cause of bank failure was the inability to manage the most basic of banking risks, namely credit risk. The Barings failure in the UK and the Sechold debacle in South Africa have illustrated how the demise of otherwise sound banks will occur if off-balance sheet risk in the form of derivative financial instruments is not managed properly.

10.2.2.2 Competitive Neutrality

> *At a gathering of European central bank governors to discuss the steps towards monetary union, much was said about the need to create a level playing field. Eventually Eddie George, Governor of the Bank of England, became dissatisfied with the somewhat pretentious discussions. 'Gentlemen,' he is reported to have declared, 'the only level playing field I have ever seen was an ice rink.'*
>
> (Finance Week 1994: 40)

In practice, it is no easy task to create and maintain a financial system which in all respects ensures fair and equitable competition between the various categories of financial intermediaries. It is therefore significant that the South African model of supervision displays the greatest degree of competitive neutrality as regards deposit-taking financial intermediation. This is due to the elimination of any legal distinction between various classes of deposit-taking institutions; a distinction which is still maintained in the UK, in the case of building societies.

The inclusive nature of the German definition of banking activity also lends itself to competitive neutrality. Yet although various classes of banking institutions are regulated according to one Banking Act, differing legal and taxation arrangements still apply to many of these institutions. In particular, separate regulations pertaining to mortgage banks as well as the state ownership of savings banks is not conducive to competitive neutrality.

10.2.2.3 Stability

Stability-related principles relate to the promotion of a high measure of stability in financial markets by maintaining the appropriate degree of safety and soundness. Three such principles apply from a risk-management perspective:

- a proper assessment and management of risks;
- the use of regulatory requirements based on current market values rather than historic values; and
- a willingness by the regulators to take timely action.

In all three systems that have been surveyed, regulatory authorities have imposed acceptable risk-management standards to be observed in respect of the risk-management activities of banks. The procedures for identifying various financial risks and establishing adequate capital requirements for banks, indicate observance of this principle.

In order to analyse a bank's risk-profile it is theoretically correct to mark-to-market a bank's entire balance sheet. However, as it is difficult to obtain reliable estimates of market value in all instances, there is still heavy reliance on book values based on historic costs. In the inflationary South African environment the absence of inflation-adjusted accounting practices may tend to understate the true value of a bank's equity and investments and thereby reduce the bank's capital ratio. The degree of current-value accounting practised is still lacking in all the systems.

The use of market values (or approximations thereof) in regulatory returns as well as financial statements should be further encouraged.

Banking regulatory authorities have taken corrective action when detecting market deficiencies. In the vast majority of such cases supervisors have attempted to preserve systemic stability and adaptations to regulations have been made in response to any regulatory defects.[385]

10.2.2.4 Social Objectives

Social objectives have not been found to influence the regulation of banks in any of the banking systems analysed here with the sole exception of maximum lending rates. However, South Africa differs from the UK and Germany as it faces huge social challenges for change in its economic system and, as such may be more prone to political pressures in this regard. In future, it may become increasingly important not to allow social objectives to overly influence South African financial regulation. [386]

Since 1995 South African banks have been permitted to manage the accounts of regional governments, which were previously handled by the Reserve Bank. The allocation of these accounts was not done purely on cost considerations but banks also had to demonstrate their commitment to the government's Reconstruction and Development Programme. Although McConnochie (1995: 9) correctly argues that the costs of such actions are minimal compared to the benefits of the peaceful political transition, the setting of these requirements represent a form of regulation by social objectives, which are not desirable in the financial system.

The most significant influence on banking regulation by social objectives was the assistance rendered to the failed African Bank. As the failure of this bank posed no systemic risk, the South African regulatory authorities correctly refused assistance. The insistence by political authorities that African Bank be saved in order to protect its unsophisticated depositors and foster economic empowerment of the

---

[385] See for instance paragraph 6.2.1 for the reponse of UK regulators to the failure of Barings Bank.

[386] Quinn (1995) makes a relevant point when he discusses banking supervision in a transitional economy by stating that the stability of any banking system is a blend of market discipline and official intervention, but points out that ultimately the blend is a political decision, in the sense that it reflects the social objectives of a country. However, Quinn (1995: 198) argues that there is little room for social compromise in the system of supervision, saying that 'the banking system never will become strong if the supervisory arrangements do not seek to reflect the highest international standards from the earliest stage'.

underprivileged has underlying social considerations which cannot be justified from a risk-management perspective.

10.2.2 Regulatory Authorities

A comparison of banking regulatory authorities was conducted in Chapter 6 and summarised in Table 6.1. As regards the supervisory approach adopted by the three banking supervisors it is evident that South Africa utilises elements of both the German and UK approach. Thus the South African Banking Supervision Department employs risk-related rules based on risk-management optimisation principles, whereas Germany is narrowly rule-based and the UK focuses on principles rather than on strict rules. The same applies to the degree of formality: the Bank of England prides itself on its informal approach while the FBSO is very formalised in its approach towards regulation. In South Africa a combination of formal adherence to and informal consultation on risk-management regulation is practiced by banking regulators. The SA regulatory approach is unique in its identification of various key players in the risk-management process and in assigning appropriate responsibilities to these parties. Moreover, the SA regulator has explicitly stated that the supervisory approach entails the optimisation of risk-management - an objective which has not been unambiguously stated by either the FBSO or the Bank of England.

The three regulatory authorities have all adopted a supervisory methodology which is primarily based on off-site examinations (and hence place great reliance on third parties such as auditors). It is of significance that in the wake of the Barings disaster the UK regulator has signalled that it will place more emphasis on on-site supervision in future.

German regulatory authorities do not interact as frequently with bank management as do the UK and SA regulators. German banking regulators are also dissimilar to the UK and SA for another reason, namely that the FBSO is not a department of the Bundesbank (although it closely interacts with the latter).

Historically, regulatory authorities have adopted an institutional approach to the regulation of financial market activity, mainly as a result the specialist nature of financial institutions. Both the UK and South Africa are placing more emphasis on the functional approach to regulation. The German institutional approach is so wide that it implicitly covers a great variety of financial activity. In effect, all three systems employ the institutional and functional approach to regulation in parallel, as the regulatory authorities are concerned with the soundness of institutions, as well as the way in which particular services are provided. It is submitted that this is the correct conceptual approach, due to the reason put forward by Llewellyn in Falkena (1994: 5) namely that ultimately: '..it is institutions that become bankrupt and not functions'.

The proposals put forward by the Jacobs and Melamet Committees provided for the creation of a single regulatory authority which would have entailed a combination of functional and institutional regulation. The fact that these proposals have not been implemented and that the Policy Board is not vested with executive powers, means that in practice South African regulation is still conducted mainly along institutional lines.

10.3 Prudential regulation - Comparative Analysis

Table 10.1 Prudential regulation in the UK, Germany and South Africa: a comparison

Component	UK	Germany	South Africa
Entry Requirements			
Minimum Capital	Yes	Yes	Yes
'Fit and proper' test	Yes	Yes	Yes
Economic needs test	No	No	No
Foreign entry	Yes	Yes	Yes
Permissible business activities			
Limitation on insurance business	No	No	Yes
Limitation on securities business	No	No	No
Disclosure requirements			
Financial statements	Yes	Yes	Yes
Supervisory returns	Yes	Yes	Yes
Auditor involvement in risk disclosure	Yes	Yes	Yes
Capital adequacy			
Risk-based approach	Yes	Yes	Yes
Risk Assets limits			
Loan concentration	Yes	Yes	Yes
Country risk	Yes	Yes	N/A
Interest rate risk	Yes	Yes	Yes
Foreign exchange risk	Yes	Yes	Yes
Off-balance sheet risk	Yes	Yes	Yes
Liquidity Adequacy	Yes	Yes	Yes

As can be seen from Table 10.1 which compares prudential regulations in the three countries, there is a high degree of similarity in that all the regulatory frameworks are geared at the management of risks assumed by banking institutions.

This is particularly evident as regards entry requirements. Accordingly, a minimum capital requirement and 'fit and proper' test are applied in all three countries. The Bank of England and the Bundesbank have set relatively low capital requirements which result in a relatively modest barrier to entry. In contrast, the South African regulators require a more substantial injection of initial capital which implies that the barrier to commencing banking is relatively high. An economics needs test is not applied in any of the three systems as there is no prudential justification for such regulations. In Germany and South Africa, little distinction is made between the entry requirements applicable to local and foreign banks, whereas there appears to be somewhat more concern by UK regulators to ensure a strong British presence in the UK banking system.

In terms of permissible business activities both Germany and the UK allow banking groups to fully integrate securities business and to full ownership of insurers. In South Africa banks have been permitted to engage in securities activities through subsidiaries since 1995. However, the interests of SA banks in insurers are limited to 49 per cent of the share capital.

As regards disclosure requirements all three regulators require banks to make disclosures which are relevant to assessing the risk-profile of each bank. However, South Africa can be singled out as the only system where the disclosure requirements relate directly to the various risks managed by banks. In Germany, the risk-information can be deduced from financial returns although it is not evident that this is the regulatory intention and in the UK greater reliance is placed on management interviews to form an overall risk-assessment. In all three countries auditors have a legal duty to provide the regulatory authorities with information on the risk-profile of a bank. In South Africa auditors are legally required to be extensively involved in the overall risk-management process. This is less so in Germany, while in the UK it is up to bank management to decide to what extent to which extent auditors form part of risk-management.

In the assessment of capital adequacy the risk-based approach is favoured by all three countries. The Bank of England is unique in employing an informal risk-asset and target ratio for each bank. Germany and South Africa have adopted the minimum 8 per cent ratio of liable capital to risk-adjusted assets, favoured by the BIS. All three supervisory authorities have set limits to traditional banking risks.

Regarding liquidity adequacy, the Bank of England distinguishes between normal trading conditions and crisis conditions whereas the Bundesbank employs a complicated and inflexible set of rules. In contrast the South African approach to liquidity risk-management is uncomplicated, thereby allowing for ease of compliance.

10.4 Protective regulation - Comparative Analysis

Table 10.2 Protective regulation in the UK, Germany and South Africa: a comparison

Component	UK	Germany	South Africa
Emergency liquidity assistance			
Criterion: Systemic stability	Yes	Yes	Yes
Discretionary	Yes	Yes	Yes
Deposit insurance	Yes	Yes	No
Compulsory	Yes	No	-
Private / Public	Public	Private	-
Fee structure risk-related	No	No	-
Funding provisions risk-related	No	No	-
Degree of coverage	Limited	Unlimited	-

The major differences and similarities in the policies adopted towards protective regulation in the UK, Germany and South Africa are set out in Table 10.2. The most important aspect is that all three regulatory authorities will only provide emergency liquidity assistance to a bank, if the failure thereof poses a risk to the stability of the banking system. Consequently, there is no legal duty in any of the systems imposed on banking regulators to provide assistance and they may exercise a great degree of discretion.

Deposit insurance arrangements exhibit a much greater variety. In South Africa a deposit insurance scheme is conspicuously absent, in Germany the deposit protection fund is private and voluntary (but encouraged by the Bundesbank) while the UK has a public and compulsory deposit insurance scheme.

Neither Germany nor the UK make use of risk-related premiums to fund deposit insurance schemes, which means that these schemes suffer from moral hazard and that less risky banks are cross-subsidising more risky banks in both systems. The German deposit insurance system is remarkable for offering nearly unlimited protection to depositors, whereas the UK scheme is geared specifically towards smaller depositors.

10.5 Monetary requirements - Comparative Analysis

Table 10.3 Monetary requirements in the UK, Germany and South Africa: a comparison

Component	UK	Germany	South Africa
Variations in reserve asset requirements	No	Yes	Yes
Interest rate controls	No	No	No
Credit Ceilings	No	No	No
Allocation by regulation	No	No	No
Exchange control	No	No	Yes

The policy applied regarding monetary requirements and adopted by banking regulators in the UK, Germany and South Africa is highlighted in Table 10.3. In all three systems the regulators steer away from the use of interest rate controls, credit ceilings and allocation by regulation as elements of prudential, monetary or even social policy. Direct monetary requirements have a malign influence on the risk-management activities of a bank. The avoidance of such regulations by all three regulators reflects an acknowledgement of the costs associated with these instruments. The UK is unique in so far as it does not make use of prescribed reserve asset ratios as an instrument of monetary policy. Finally, South African banks are singularly restricted to manage foreign exchange risk or assume country risk due to the existence of exchange control restrictions.

10.6 South African Issues

In principle the aims of banking supervision as well as the means to be employed are similar across financial systems. South African banking supervisory authorities have historically paid much attention to the practical implementation of regulations based on financial risk-management, in accordance with the standards laid down by the BIS. On various occasions the supervisory framework has been amended in response to changes in the local and global financial system.

The following suggestions arise from the supervisory processes in the UK and Germany as well as the initial theoretical foundations of this dissertation. In many of the instances further research will be required before these suggestions can be implemented, while other aspects are already under discussion.

In future, it is expected that six issues will dominate the agenda of South African regulatory authorities; first the extension of the regulatory net across all financial intermediaries in the financial system; second the further adaptation to international regulatory requirements, as a consequence of the accelerating financial integration of South Africa in the global financial system; third, the possible acceptance that a deposit protection scheme is the most appropriate means of serving the interests of consumers of banking services (i.e. depositors) who are in need of a degree of protection against possible bank failure; fourth, the application of consolidated supervision; fifth the impact of further deregulation and finally, a degree of re-regulation to improve the regulation of risk.

10.6.1 Regulatory Coverage

This study has shown that South African deposit-taking institutions are well-regulated as regards both regulatory coverage of all deposit-taking activities and content of the regulations.

Informal savings schemes

The few instances in which deposit-taking activities do not yet reside under the auspices of supervisory authorities, most notably in the case of informal savings schemes, are expected to be accommodated in the near future. As these quasi-banks are not financially sophisticated, it is proposed that amendments to the Banks Act are not appropriate to effect the regulation of these entities.

Instead, these informal 'banks' should be regulated informally, with the main object of supervision being to ensure that commitments made to the public can be honoured, rather than seeking to thrust the principles of risk-management onto such schemes.[387]

---

[387] This would be similar to the two tier banking system which existed in the UK as described in paragraph 6.2.1. Care should therefore be taken that informal banks do not expand to such an extent that it could give rise to a similar crisis.

The sophisticated nature of banking regulation in South Africa contrasts with the relatively 'under'-regulated activities of other financial intermediaries such as life assurers and investment businesses.

Assurance institutions

The growth of the insurance industry at the expense of the banking sector has been documented in the Jacobs Report (1992: 5-23). Banking activity in South Africa is subject to extensive prudential controls based on the optimisation of risk-management by the banks. However, as Jacobs remarked (1987: 4)

> *'it is unfair to single out banks for control in respect of these activities and for instance not the similar activities engaged by insurers. The upshot of such a discriminating policy is that certain financial activities tend to move from the balance sheets of the banking industry to those of the insurance industry and this is a typical example where lack of co-ordination in the application of supervisory control can result in the distortion of equitable competition.'*

Although some exogenous factors, such as a consistently high inflation rate, have contributed to the dominant position of insurers in the South African financial system, regulatory considerations (in particular those related to taxation), have skewed the competitive playing fields between insurance and banking activities. For instance, life insurers do not have to maintain liquid asset and reserve requirements even though a large part of their business is very similar to deposit-taking. Banks face the constraint of not being allowed to invest their operating income in equity but have to finance such investments out of their own capital. The life assurers on the other hand, invest the gross of their operating income (premiums) in equity and other related instruments which offer a much higher return than can be generated in ordinary banking business. While the nature of an insurance policy is conceptually different from a deposit claim,[388] it is submitted that the underlying activity of these institutions merely amount to varying modes of financial intermediation. Each form of intermediation is concerned with the management of financial risks.

Once it has been accepted that the optimisation of risk-management is the primary purpose of regulatory authorities, this theory should also be applied to the insurance industry and indeed to all forms of sophisticated financial intermediation. As such, the general application of risk-management regulations may serve to marry hitherto diverse regulatory techniques and approaches. In the wake of increasing conglomeration of financial institutions and the trend towards the creation of institutions offering a full range of financial services, only the theory of financial risk-management developed here is able to serve as a conceptually sound rationale of regulation in all instances of financial intermediation.[389]

---

[388] In the case of insurance products the investor usually carries the risk whereas banks assume risks and cannot pass these on to depositors.

[389] For example insurance companies providing guarantees without being subjected to capital requirements.

Investment businesses

While not in the strict purview of this dissertation, one cannot escape the impression that banks are more extensively regulated than insurers / assurers who are in turn more regulated than investment businesses. It is therefore appropriate from the point of view of competitive neutrality that the investment businesses be subjected to a greater degree of supervisory regulation. On the wholesale level possible systemic dangers can be averted through the imposition of capital adequacy requirements; whereas more intensive regulation aimed at consumer protection (e.g. increased disclosure requirements) is required on the retail level (e.g. agents, advisors and brokers).[390]

10.6.2 Internationalisation

Despite years of relative economic isolation, the South African regulatory framework conforms to international standards as most clearly formulated in the BIS proposals. However, the recent re-entry of South Africa into the global financial market has serious regulatory implications. The regulatory issues related to the increasing internationalisation of South African banks may be explained as follows:

Level of integration with international markets

The political and social reforms in South Africa over the past few years were accompanied by equally important changes in South Africa's international financial relations.[391] Stals (1996(a)) reasons that South Africa has already gained some useful experience from again being part of the global financial markets:

> *'We have seen the importance of being on our guard for unexpected changes in international market conditions over which we have no control. We have learned to be cautious about excessive speculative capital inflows into the country, and how important it is to take account of the effects of such flows on domestic monetary policy. We have experienced the abruptness of changes in the direction of capital flows, and the consequences thereof for the exchange rate of the rand. We have learned how important it is to remain flexible in times of essential adjustment, and to respect the forces of the global market.'*

---

[390] The Policy Board for Financial Services and Regulation (1996) recently issued a consultative paper on the regulation of retail investment services in South Africa. The paper recommends a code of market conduct as the main instrument to be employed in the regulation of retail investment service providers. In particular, disclosure requirements constitute a major regulatory instrument for the achievement of investor protection. The regulation of retail investment services will require the introduction of new legislation. It is the intention to present draft legislation to Parliament in 1997.

[391] Stals (1996(a)) lists the major events which accelerated integration in the global financial markets: the termination of the 1985 Debt Standstill arrangements in 1994; the removal of international sanctions and boycotts after the election of the Government of National Unity in April 1994; the re-accessing of global capital markets when South Africa received a formal credit rating; and the abolishment of the financial rand system in March 1995 to remove the remaining exchange controls applicable to non-residents.

The most conspicuous regulations which contrast with international norms concern the restrictions placed on residents on the free flow of capital into and out of South Africa. While these exchange control regulations apply only to South African residents and have been significantly relaxed of late, a greater degree of liberalisation is espoused. Relatedly, the restrictive foreign currency risk exposure regulations, hamper the overall risk-management activities of South African banks and place them on an unequal competitive footing vis-à-vis foreign banks.

Capital flows

Capital flows to and from South Africa are the result of both the financing portion of real transactions and financial portfolio adjustments. Technological progress has enabled the large scale flow of funds across national market frontiers. Globally, capital movements have come to vastly outweigh trade transactions. Due to the inhibiting effect of foreign exchange controls, this does not appear to have occurred to a similar extent in South Africa. South African regulatory authorities are bound to experience great difficulties in maintaining capital controls. Once these are relaxed, many domestic banks will see fit to establish a greater degree of physical presence overseas. This will need to be accompanied by a certain amount of re-regulation, to ensure the risk-related to offshore activities can be both adequately measured and controlled.

Regulatory arbitrage

The South African banking regulator appears committed to comply with internationally accepted standards of banking supervision. The Standing Committee for the Revision of the Banks Act has resolved that all pronouncements by the Basle Committee would be adopted. This approach should minimise regulatory arbitrage. Remaining banking regulations that hamper banking activity in South Africa (such as reserve requirements, restrictions on non-bank activities, credit allocation for social purposes) together with deregulation (relaxation of exchange controls in respect of South African residents) will further encourage international banking. In a barrierless global economy, South African banks may attempt to operate in a foreign regulatory framework if the regulatory burden is thereby reduced. The trend towards the international convergence of regulatory measures is therefore likely continue in South Africa.

Money laundering

One regulatory implication of the internationalisation of South African banking is the need to make more explicit provision for the prevention of money laundering. The South African Law Commission is establishing a legal framework to combat local money laundering. In a paper entitled 'International Co-operation in Criminal Prosecution' three proposed bills are set out: international co-operation in criminal matters, proceeds of crime and extradition amendment. These bills have been tabled in Parliament and are expected to be passed in February 1997 (KPMG 1996: 3).

Foreign banking activity

The growth in the presence and activities of foreign banks in South Africa has become a feature of the re-acceptance of South Africa in the global financial system. As of yet, most of these banks have not made significant inroads into the South African banking market as they mainly serve the corporate sector. However, the proven sophistication, much higher capital base, obvious cross-border expertise and certain regulatory advantages (i.e. absence of liquid-asset requirements) may negatively alter the competitive position of South African banks in their own market. Should this be the case, regulatory authorities may experience pressure from local banks to 're-regulate' in order to protect the domestic banking institutions.

Metcalfe (1996) recently surveyed the activities and strategies of foreign banking institutions in South Africa. The foreign banks believe that the most important changes occurring in the South African market are the anticipated future lifting of exchange controls. These banks feel restricted by these regulations. They recognise that significant deregulation has already taken place but await the lifting of exchange controls to put planned strategies into action. Nevertheless, the South African market is unlikely to be very attractive to foreign banks as the market is relatively small, endures political uncertainty and does not offer a gateway to a large international market (as for instance a deregulated Australia offered into Asia).

Interestingly, the Reserve Bank of Australia requires all foreign banks who wish to establish a presence in Australia, to pass an 'economics benefits test' in addition to normal prudential requirements, which entails proving that the activities of the foreign bank will bring net benefits to the Australian economy. A 'needs test' is also applied at the licensing stage in Japan and the USA but not in the UK. From a prudential perspective there is no justification for an economics benefits test to be applied as it has no relevance on the risk-management abilities of a prospective banking entrant. The South African regulatory authorities have consequently been correct in following the UK and German example in this regard.

10.6.3 Depositor Protection

A third important regulatory issue, namely the possibility of introducing a deposit protection scheme in South Africa, is currently under investigation by representatives of the banking sector as well as the relevant supervisory authorities. Two points are relevant here: first, that individual banks will continue to fail despite the application of advanced risk-based regulations, and second, that bank failures inevitably result in costs which have to be borne by one party or another. The choice from a regulatory perspective is merely who has to foot the bill of consumer protection. If the consumer is to be indemnified against certain losses, the state may wish to recompense customers on political considerations or the task may be assumed by the regulatory authorities themselves. South Africa emerges as a notable exception being the only financial system without explicit deposit protection. The stated attitude of South African regulatory authorities, namely that banks should be allowed to fail, underlines the need for such a scheme. The desirability of deposit protection acquires further

justification in view of the relatively unsophisticated nature of a large proportion of the consumers of financial products and services in South Africa.

According to Wiese (Financial Mail 1995(b): 36) there appear to be three possibilities:

One is to establish a small deposit insurance fund which requires mandatory participation by banks. In the case of a bank failing to meet its commitments, depositors would be entitled to a predetermined limited amount as a reimbursement of their deposits at the failed bank.

An alternative would be to have a fully funded deposit insurance fund for all deposits. This could be funded by diverting a certain proportion of banks' interest income to this fund.

Thirdly, private insurance on a voluntary basis could be considered. This 'market-based solution' is the preferred alternative of the South African Reserve Bank (Financial Mail 1995(b): 36).

While the South African Reserve Bank is correct in striving to attain a market-led solution to deposit insurance, banks are equally correct in seeing such a scheme as an additional regulatory burden and / or cost. Without the exercise of moral suasion or the application of political pressure, the introduction of a South African deposit protection scheme is unlikely to come about expeditiously. It is suggested that such a scheme should cover only small depositors and that insurance premiums should take cognisance of the risk-profiles of the bank of which the liabilities are insured. The proposed system addresses the issue of the costs associated with consumer protection by means of applying the theory of bank risk-management.

Fortunately the South African Reserve Bank deputy governor Chris de Swardt has said that 'it seems likely that a limited depositor protection scheme will be established and the funding of such schemes is now being investigated.' (Financial Mail 1996(b): 32). It is hoped that the above considerations are taken into account when a proposal is made to the Minister of Finance.

10.6.4 Consolidated Supervision

Consolidated supervision in South Africa has improved considerably since the 1994 failure of Securities Holdings Limited as it now explicitly assesses consolidated group risk and consolidated group capital adequacy. Nevertheless, the present supervisory process whereby consolidated supervision of financial conglomerates is conducted by means of quarterly discussions between the Financial Services Board and the Banking Supervision Department is considered inadequate. This problem is exacerbated by the ill-defined overall structure of regulatory authorities. It is therefore recommended that consolidated supervision of conglomerate financial institutions be exercised by a single regulatory authority namely the Policy Board which should be vested with executive powers to regulate the overall risk-management of a financial institution.

10.6.5 Deregulation

It has been the *leitmotiv* of this dissertation that the regulation of banks finds its economic justification in the risk-management activities of banks. It was demonstrated that the regulation of financial and systemic risk is the prime concern of regulatory authorities in the three systems that were surveyed. Although the comparison was mainly of a static nature, it was also evident that all three systems have been subject to forces of deregulation as the regulations which were inappropriate (from a risk-management perspective) were relaxed by the authorities.

Remaining regulations

The level of financial and banking deregulation in South Africa is advanced as indicated by the following: the BIS guidelines in respect of banking supervision are adhered to closely; there is not artificial separation between various classes of deposit-taking institutions (e.g. commercial and merchant banks); foreigners have full access to ownership of domestic banks provided they meet the necessary 'fit and prudent' criteria.

Exchange control regulations

The major remaining regulation to be deregulated relates to exchange control restrictions on South African residents. Should these controls be further deregulated or abolished it is expected that the major impact in the banking industry will relate to the shareholding in banks. As opportunities for investments abroad become available, South African insurance companies (who are the main banking shareholders) are expected to divest from the often complicated share - and cross holdings in the South African economy. This could conceivably result in greater foreign ownership of South African banks, including at the retail level, as shareholding in established banks becomes more available.

The further remaining regulation is the limitation of banks' shareholding in life insurers. As there is no compelling prudential justification for the separation of these financial services it is expected that the pressures towards deregulation in this area will increase over time.

Conglomeration

The global trend towards financial conglomerates has not yet impacted on the unique shareholding composition of South African banks (according to which all major South African banks are owned by life assurers). The applicability of section 80 of the Banks Act which limits the interests of banks in insurers to 49 per cent should be reviewed in the light of the German model of bank insurance or universal banking. While South African banks distribute investment products such as unit trusts they do not offer insurance products. These they should be able to distribute at a much lower cost than insurance companies with their old-fashioned and costly brokerage networks.

Minimum reserve assets

A unique aspect of UK monetary deregulation is the ability of the Bank of England to conduct monetary policy without a minimum reserve requirement. This is facilitated by the convention requiring the clearing banks to inform the Bank of England of their daily target clearing balances. This enables the Bank of England to influence short-term interest rates by means of open market operations. The South African Reserve Bank employs a variable reserve requirement as an instrument of monetary policy.[392] As minimum reserve requirements impose a regulatory compliance cost on the banking sector (in the form of unearned interest) the feasibility of abolishing the minimum reserve requirements should be investigated. Alternatively, the South African Reserve Bank should consider paying a market-related rate of interest to the banks on their full minimum reserve balances.

Separately capitalised entities for the conduct of securities businesses

The most visible process of deregulation in the South African financial markets has been the recent changes in the JSE. The JSE no longer prescribes brokerage commissions, corporate membership is allowed and brokers may trade as agents and / or principals. As part of the deregulation of the South African equity market, banks are now permitted to be corporate members of the JSE. South African as well as foreign banks have actively acquired interests in existing stockbrokers or have established their own operations. It is instructive that these changes appear to have significantly enhanced competitive forces and have led to increased foreign participation in the equity markets and in broking firms.

Banks were required to set up independently capitalised entities to conduct securities business. In the UK and Germany, banks are able to engage in all securities activities without any prescribed holding company structure. Therefore, under these arrangements, full functional integration of banking and securities activities is possible, albeit at the cost of allowing risk to 'spill over' from the securities business into banking. The managing of the risks inherent in securities business are similar to other financial risks and the South African approach of requiring a legal separation to compartmentalise the risk is not supported.

10.6.6 Re-regulation

Large exposures

An important aspect of regulatory policy where South Africa is not yet in conformance with BIS guidelines is the more generous large exposure allowance of 25 per cent of a bank's capital.[393] In the opinion of the writer, the use of credit derivatives should be encouraged by the South African Reserve Bank and the stricter 15 per cent large exposure limit should be imposed. This recommendation is in accordance with the general thrust of this study, namely that banks are managers

[392] See paragraph 9.4.1.

of risks and that in this particular instance the credit risk can be managed by means of a derivative financial instrument.

Increased understanding of risk

As the sophistication of banks to manage banking risks increases, so will the demand made on regulatory authorities to understand the impact of these risks and hence to regulate them appropriately. It is therefore likely that a degree of re-regulation to manage complicated banking risk more effectively and efficiently may occur.

Reform of the reporting system

The South African variation of banking regulation is theoretically and practically commendable as the only regulatory approach which explicitly regards the principles of sound risk-management as the basis for regulation. This is, for instance, exemplified by the various regulatory returns which have been designed in accordance with the requirements of a number of surveyed banks and have the aim of serving as a useful risk-management tool for the bank management itself. While new regulations are issued frequently it may at present be necessary to once again overhaul the reporting system. This was last done in 1991, following an investigation by Van Greuning (1991) into the effectiveness of the risk-management returns which are required by the Banking Supervision Department.

---

[393] See paragraph 9.2.5.1.

10.6.7 General Issues

Apart from the above five major issues, a number of more general suggestions with regard to South African banking supervision can be made:

Supervisory disclosure to the public

The South African Reserve Bank has made it clear that the responsibility for ensuring sound risk-management rests primarily with the directors of a bank, whereas internal and external auditors are responsible for identifying problems. Depositors are expected to keep themselves informed about the risk-profile of the bank to whom they entrust with their deposits. However, of all the comprehensive returns supplied to the South African Reserve Bank (see Table 9.1) only form DI900 is made available to the public. The remaining returns often contain information that is vital in determining the financial soundness of a bank. Financial statements, despite much increased disclosure requirements, are insufficient to provide adequate information on the risk position of a bank in the modern financial environment. It is therefore recommended that the South African Reserve Bank consider disclosing more risk-based information in respect of individual banks. It is recognised that in some cases the disclosure of negative information may induce further distress for the banking institution concerned. However, the advantages of such a market based approach is favoured above intransparency.

According to Wiese (Financial Mail 1995(b): 36) the South African Reserve Bank has realised that there are few systemic repercussions when there is a run on a small bank. Only the financial market can impose the discipline to ensure that domestic banks remain competitive. Consequently, more risk-based information on all banks should be made available to the public.

Statutory disclosure by banks

Wiese (1995) states that in almost every instance of problems experienced by a bank, the transactions that were causing the problems were not adequately disclosed in the statutory returns submitted to the supervisors and, in certain cases, in the management accounts presented to the board of directors. The lack of proper disclosure and reporting implies that the concept of risk-management as a partnership between the various key players[394] may not always be fully appreciated by some members of the banking sector. This could result in a broadening of the supervisory approach towards a greater degree of 'on-site' supervision, similar to current UK efforts.

[394] See paragraph 6.4.2.

10.7 Conclusion and Recommendation

> *'….. the development of quantitative techniques for the management of risk has enhanced our quality of life and set the accelerating tempo of modern times. These methods allow people to take more risks than they otherwise would - a benefit to society which cannot advance without risk takers. Without the laws of probability, no great bridges would span widest rivers, polio would still be crippling children, and no airplanes would fly …. Without fire insurance only the wealthiest could afford to own homes … If there had been no liquid capital markets allowing savers to diversify their risks, the spirit of enterprise would have been stifled.'*
>
> Peter L. Bernstein (1996) in The New Religion of Risk-management

Banking, in its ordinary as well as in its sophisticated sense, essentially amounts to the management of financial risks. Yet the need for financial regulation does not flow from the mere fact that banking is a 'risky business'. In a competitive market economy all market participants are subject to the vagaries of risk, and indeed extract market returns only through engaging in and managing' risks inherent to each type of business activity. In addition, the degree of financial deregulation remarked upon at the outset have increased the opportunities of banks to manage a wider range of financial risks.

Banks also do not derive uniqueness from the fact that undue risk exposure may lead to the failure of a bank. The same considerations apply to every other enterprise. Philosophically, the market economy thrives on birth and death: without allowing for death, the propensity for rejuvenation and for birth is reduced. It follows that it is not the task of the banking regulator to prevent all types of bank failure as the cost attached to such regulation would far exceed the competitive benefits to be gained by some degree of unregulated market activity.

Nevertheless, there exist important banking attributes which justify the comprehensive regulations to which banks are subjected, and which have been documented in this study. Banks are the major financial intermediaries in any economy, accepting and loaning funds to and from the general public. Banks 'grease' the wheels of the economy by virtue of their payment activities. Banks play an essential role in the financial system and hence the externalities of a bank failure may reach much wider than the demise of other non-financial enterprises. Specifically, the protection of consumers and the safeguarding of the stability of the financial system provide the rationale of the regulation of banks.

How is banking regulation best applied? If it is the business of banks to manage financial risks, the only conceptually sound manner in which to do so is to direct regulation at these activities. The purpose of regulations should be the optimisation of risk-management by the banks themselves. If this is achieved there will be no need for regulatory authorities to come to the assistance of failing banks - in most cases a costly exercise, due to the quantum of bank liabilities.

In the real world achievement of such a high standard - namely the optimisation of risk-management - is certainly not always possible. Consequently banks will continue to fail despite the efforts of cautious regulators and management alike. In this case

the regulatory framework should provide for measures which safeguard the financial system, when an important intermediary can no longer fulfil its obligations. While consumer protection is an issue linked to systemic stability, it is the latter which should be of greater concern to supervisory authorities.

The existence or introduction of a deposit-guarantee scheme poses the opportunity for unburdening the regulatory authorities of the responsibility of consumer protection in most instances. Moreover, deposit protection schemes can be organised in a manner which links insurance premiums with the risk-profile of a given bank, which constitutes the direct (and correct) application of the general theory of risk-management. This is viewed as a market-based solution to address the concerns of (and regarding) banking customers.

The research problem - that the regulation of deposit-taking financial intermediaries should be (in theory) and is (in practice) no more than an effort to guide the risk-management activities of banks - has been the golden thread of this dissertation. It has been proven that the theory of risk-management regulation applies to banks in all the systems surveyed. Moreover, it has been argued that the theory also provides a useful conceptual basis for a more general application in other spheres of financial regulation.

No doubt the further refinement of risk-management philosophies, rules and principles will occupy much academic thought in years to come. There is ample scope for further rigorous and quantitative research in this fascinating field of finance. The rewards lie not only in extending the boundaries of science but also in the practical prevention of banking crises which will for the time being remain an endemic feature of the market-orientated financial system.

APPENDICES

Appendix I: UK Definition of Bank Capital

Tier One: Core capital

- Permanent shareholders' equity;
- Allotted, called up and fully paid share capital / common stock;
- Perpetual, irredeemable, non-cumulative preferred, and perpetual, non-cumulative preferred shares convertible at the issuer's option into common shares with the Bank's prior consent;
- Disclosed reserves in the form of general or other reserves;
- Published retained profit or loss (i.e. net of anticipated tax, dividends and any other appropriations) arising during the course of the current year;
- Minority interests arising on consolidation from interests in permanent shareholders' equity;

less

- Goodwill and other intangible assets;

and

- Current year's unpublished losses.

Tier Two: Supplementary capital

- Undisclosed reserves and unpublished current year's retained profits;
- Reserves arising from the revaluation of tangible fixed assets;
- General provisions;
- Hybrid capital instruments;
- Perpetual irredeemable cumulative preferred shares; and perpetual cumulative preferred shares redeemable at the option of the issuer and with the prior consent of the Bank;
- Convertible subordinated bonds;
- Perpetual subordinated debt which meets the conditions for primary perpetual subordinated debt;
- Subordinated term debt;
- Dated preference shares (irrespective of original maturity);
- Subordinated term loan capital with a minimum original term to maturity of over five years, subject to a straight-line amortisation in the last five years, leaving no more than 20 per cent of the original amount issued outstanding in the final year before redemption;
- Minority interests arising on consolidation from interests in Tier Two preference shares.

Deductions from total capital (total of Tier One and Tier Two):

- Investments in unconsolidated subsidiaries and associates;
- Connected lending of a capital nature;
- All holdings of other banks' and building societies' capital instruments.

Limits and restrictions:

- The total of Tier Two should not exceed a maximum of 100 per cent of Tier One elements;
- Subordinated term debt should not exceed a maximum of 50 per cent of Tier One elements;
- General provisions should not exceed 1.25 per cent of weighted risk assets.

Source: *Hall 1989: 75.*

Appendix II: UK Risk-weights applied to On-Balance Sheet Assets

0 per cent Risk-weighting

1. Cash.
2. Gold and other bullion held in its own vaults or on an allocated basis.
3. Loans to OECD central governments and central banks.
4. Claims collateralised by cash or guaranteed by OECD central governments and central banks.
5. Loans to non-OECD central governments and central banks denominated in local currency and funded in that currency.
6. Loans guaranteed by non-OECD central governments or central banks, where denominated in local currency and funded in that currency.
7. Certificates of tax deposit.

10 per cent Risk-weighting

1. Loans to discount houses, gilt-edged market makers, institutions with a money market dealing relationship with the Bank of England and those Stock Exchange money brokers which operate in the gilt-edged market, where the loans are secured on gilts, UK Treasury bills, eligible local authority and eligible bank bills, or London CDs.
2. Holdings of fixed-interest securities issued by OECD central governments with a residual maturity of up to one year, and floating rate OECD central government securities of up to one year, or similar floating rate securities of any maturity.
3. Claims collateralised by OECD central government fixed-interest securities of up to one year, or similar floating rate securities of any maturity.
4. Holdings of non-OECD central government securities with a residual maturity of up to one year denominated in local currency and funded by liabilities in the same currency.

20 per cent Risk-weighting

1. Holdings of OECD central government fixed-interest securities with a residual maturity of up to one year denominated in local currency and funded by liabilities in the same currency.
2. Holdings of non-OECD central government securities with a residual maturity of up to one year denominated in local currency and funded by liabilities in the same currency.
3. Claims on multilateral development banks: IBD (including IFC), IADB, AsDB, AfDB, EIB, and CDB and claims guaranteed by or collateralised by the securities issued by these institutions.
4. Claims on banks incorporated in the OECD and exposures guaranteed (or accepted) by OECD-incorporated banks (as before, UK building societies are treated as banks for capital adequacy purposes).
5. Claims in gold and other bullion on those market making members of the London Bullion Market Association which are not included in (4) above.
6. Claims on banks incorporated outside the OECD with a residual maturity of up to one year and loans of the same maturity guaranteed by non-OECD banks.
7. Claims on OECD public sector entities (PSEs) and loans guaranteed by such entities. In the UK, PSEs are defined as local authorities and other non-commercial public corporations.
8. Loans to discount houses which are unsecured or secured on assets other than specified with a 10 per cent risk-weighting (above).
9. Cash items in the process of collection.

50 per cent Risk-weighting

1. Loans to individuals and to housing associations registered with the Housing Corporation, fully secured by a first equitable or legal charge.
2. Holdings of securities issued by special purpose mortgage finance vehicles where the risk to the security holders is fully and specifically insured against residential mortgage loans which would themselves qualify for the 50 per cent weight or by assets which qualify for a weight of less than 50 per cent.
3. Mortgage subparticipations, where the risk to the subparticipating bank is fully and specifically secured against residential mortgage loans which would themselves qualify for the 50 per cent weight.

100 per cent Risk-weighting

1. Claims on the non-bank private sector.
2. Claims on banks incorporated outside the OECD with a residual maturity of one year and over.
3. Claims on central governments outside the OECD (unless denominated in the national currency and funded in that currency).
4. Loans guaranteed by claims on non-OECD central governments or central banks, which are not denominated in local currency and funded locally.
5. Claims on commercial companies owned by the public sector.
6. Claims on public sector entities outside the OECD.
7. Premises, plant, equipment and other fixed assets.
8. Real estate, trade investments and other assets not otherwise specified.
9. Aggregate net short open foreign exchange position.

Source: *Bank of England 1988(b).*

Appendix III: UK Large Exposures Regulations

1. As a general rule no exposure to a single counterparty should exceed 10 per cent of an institution's available capital resources without thorough justification, and no such exposure should exceed 25 per cent of available capital resources other than in the most exceptional circumstances.

2. The main exceptions to the 25 per cent rule are:
- exposures to other banks with a maturity of one year and under;
- exposures to overseas central governments;
- certain exposures of up to one year to group financial companies and connected banks;
- exposures secured by cash or British government stocks;
- in the case of bank subsidiaries, exposures guaranteed by the parent bank; and
- security in the form of cash, British Government stocks or an ECGD bank guarantee will also be considered sufficient justification for an exposure to exceed 25 per cent.

3. 'Available capital resources' will be defined as the capital base of an institution which is used for calculating the risk asset ratio. However, an institution's holding of another bank's capital will not be deducted.

4. The definition of 'exposure' adopted by the Bank for the purpose of section 38 is very wide and generally covers 'all claims on a counterparty including, for example, undrawn facilities, contingent liabilities, other counterparty risks and equity holdings'.

5. For the purpose of (4) above, the exposure will usually be taken as the full amount (namely, the book value) of all claims on a particular counterparty. However, in the case of underwriting commitments and interest and exchange rate related contracts, only a proportion of the nominal value of the commitment will be taken into account.

6. Exposures of UK-incorporated institutions will be considered, and will require to be reported on both an unconsolidated (solo) and consolidated basis. Exposures calculated on an unconsolidated basis will require quarterly reports and those calculated on an consolidated basis, six monthly reports.[1] In assessing an institution's exposures on a consolidated basis, the companies to be consolidated with the institution (which may include sister companies and holding companies as well as subsidiaries) will be agreed to by the Bank in accordance with the principles set out in the Bank's notice on consolidated supervision.

7. In the case of the UK branches of overseas institutions, the Bank recognises that large exposures can only be properly assessed in relation to the capital and exposure of the institution as a whole. In other words, it is the home supervisor's responsibility to carry out an assessment of 'large exposures'. The Bank as host supervisor is also concerned with the large exposures of UK branches particularly, but not solely, in order to carry out a full assessment of the branch's liquidity. The notice makes it clear, therefore, that the principles adopted by the Bank will, as far as possible, be applied to UK branches of overseas institutions, which are now required to report their twenty largest exposures.

8. The Bank requires each institution to set out a formal and acceptable policy on large exposures which should not be significantly changed without prior notification to, and discussion with, the Bank. The Bank will require reporting accountants to pay particular attention to the systems for the control and reporting of the large exposures.

[1] Included within the coverage of an institution's unconsolidated returns are: all of its branches (including overseas branches); and any subsidiaries that the Bank has agreed in writing may be consolidated for the purpose of reporting the bank's solo (i.e. unconsolidated) capital ratio in accordance with the principles set out in the Bank's notice on consolidated supervision. The reporting institution's exposures to such subsidiaries will not be separately assessed nor required to be reported.

9. Where a UK-incorporated institution has a number of exposures to a non-bank counterparty of more than 10 per cent of its capital base, the Bank will generally require higher capital ratios to be maintained than would otherwise be the case. The amount of extra capital required will depend on a number of factors but will be significantly higher where the exposure exceeds 25 per cent of the institution's capital base.

Source: *Bank of England 1987(b).*

Appendix IV: UK Credit Conversion Factors for Off-Balance Sheet Risk

	Instruments	Credit Conversion Factor
A	Direct credit substitutes[1] including general guarantees of indebtedness, standby letters of credit serving as financial guarantees and acceptances.	100 per cent
B	Sale and repurchase agreements and asset sales with recourse where the credit risk remains with the bank.[2]	100 per cent
C	Forward asset purchases, forward deposits and the unpaid part of partly paid shares and securities, which represent commitments with a certain drawdown.	100 per cent
D	Transaction-related contingent items (e.g. performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions).	50 per cent
E	Short-term self-liquidating trade-related contingent items (such as documentary credits collateralised by the underlying shipments).	20 per cent
F	Note issuance facilities and revolving underwriting facilities.[3]	50 per cent
G	Other commitments (e.g. formal standby facilities and credit lines) with an original maturity of one year and over.	50 per cent
H	Similar commitments with an original maturity of up to one year, or which can be unconditionally cancelled at any time.	0 per cent
I	Endorsement of bills.[4]	0 per cent

Multi-option facilities should be disaggregated into their component parts and each component part weighted according to the above classification, subject to the limitation that the total value of all the components does not exceed the value of the facility.

Source: *Bank of England 1988(b).*

[1] That is, where the risk of loss in the transaction is equivalent to that of a direct claim on the counterparty. Where the risk of loss depends on the likelihood of a future event which is independent of the creditworthiness of the counterparty, the transaction should be classified as either D or E.

[2] These items are to be weighted according to the category of the issuer of the security and not according to the counterparty with whom the transaction has been entered into. Reverse repos (i.e. purchase and resale agreements where the bank is the receiver of the asset) should be treated as collateralised loans, with the risk being measured as an exposure to the counterparty. Where the security temporarily acquired attracts a preferential risk-weighting, this will be recognised as collateral and the risk-weighting accordingly reduced (e.g. an OECD government security).

[3] To be applied to the total amount of the institution's underwriting obligations of any maturity. Where the facility has been drawn down by the borrower and the notes are held by anyone other than the reporting institution, its underwriting obligation must continue to be reported as the full nominal amount. (Own holdings of notes underwritten should, however, be deducted from the overall value of the commitment because they are weighted as an on-balance sheet item.)

[4] Endorsement of bills which have not been accepted by a bank carry a credit conversion factor of 100 per cent.

Appendix V: German Off-Balance Sheet Regulations

Original method of calculating off-balance sheet exposure:

	Interest rate contracts per cent	Currency contracts per cent
Up to one year	0,5	2
More than one year but less than two years	1,0	5
For every additional year	1,0	3

Under the marking-to-mark method, the credit equivalent exposure is the market value of the contract, according to the following table:

Marking-to-mark method for calculating off-balance sheet exposures

	Interest rate contracts	Currency contracts
Basis	contract replacement cost	contract replacement cost
Add on:		
Residual maturity		
Up to one year	0,0 per cent	1 per cent
More than one year	0,5 per cent	5 per cent

Credit conversion factors applied to off-balance sheet transactions

At 100 per cent of their basis of assessment

1. Bills of exchange in circulation drawn by a bank, discounted and credited to the borrower.
2. Liabilities arising from the endorsement of rediscounted bills.
3. Guarantees for asset items.
4. Assets pledged as collateral security for third-party liabilities.
5. Assets purchased under outright forward purchase agreements.
6. Forward deposits.
7. Asset sales with recourse, where the credit risk remains with the selling bank.
8. Assets which the borrower has sold to the lender, and which are transferred subject to the condition that they must be retransferred or redeemed at the lender's request.

At 50 per cent of their basis of assessment

1. Documentary credits issued and confirmed.
2. Warranties and guarantees other than those in 3 above.
3. Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs).
4. Undrawn credit facilities with an original maturity of more than one year which may not be cancelled by the bank unconditionally and without notice.

At 20 per cent of their basis of assessment

1. Documentary credits issued and confirmed in which the underlying shipment acts as the collateral

Source: *Bundesbank 1993: 109-114.*

Appendix VI: Disclosure in Financial Statements by South African Banks

Accounting Policies

In addition to the normal standards governing disclosure of accounting policies, the following are required:

- basis of recognition of principal types of revenue;
- basis of valuation of investments, dealing securities and financial derivative instruments;
- basis of distinction between items disclosed as assets, liabilities, contingencies or commitments;
- basis of valuation of loans and advances;
- condition under which accrual of interest on loans or advances is not recognised as income; and
- basis for providing for and writing off uncollectible loans and advances.

Income Statement

Disclosure in the income statement and its notes should include:

- interest and similar income;
- interest and similar expense;
- dividend income;
- fee and commission income;
- net gains or losses from each of foreign currency dealing, other dealing and investment activities;
- other operating income;
- losses on loans and advances;
- general administrative and other operating expenses; and
- taxation.

Generally, items of income and expenditure, assets and liabilities, should not be set off, subject to a few exceptions (e.g. right of legal set off) so that analysts can assess performance of the separate activities of banks and the return they obtain on particular classes of assets and liabilities.

Balance Sheet

The balance sheet should group assets and liabilities by nature and list them in a sequence that reflects relative liquidity. Disclosure in the balance sheet and notes should include:

Assets

- cash, call deposits, balances with the central bank;
- government and other securities held for dealing;
- placements with and loans and advances to other banks;
- other money market placements;
- loans and advances to customers; and
- investment securities.

Liabilities

- deposits from other banks;
- other money market deposits;
- amounts owed to other depositors;
- certificates of deposits;
- promissory notes and other liabilities evidenced by paper; and
- other borrowed funds.

Fair value of trading and non-trading investments must be disclosed when they differ from carrying values. Amounts set aside in respect of future risks must be accounted for in accordance with GAAP and disclosed as movements in retained earnings. An analysis of assets, liabilities and off-balance sheet items into relevant maturity groupings should also be disclosed.

Cash Flow Statement

As an integral part of the financial statements, the cash flow statement should report cash flows during the period, appropriately classified.

Source: *Price Waterhouse 1995.*

Appendix VII: Comparison between BIS and South African Banks Act Definitions of Tier One and Tier Two Capital

Basis of Calculation	
BIS	***BANKS ACT***
Tier One • Paid up Ordinary Share Capital and Non-redeemable Non-cumulative Preference shares • Disclosed Reserves • Less Goodwill	• Ordinary shares • Non-redeemable non-cumulative preference shares (Primary unimpaired reserve funds) • Premiums on above-mentioned shares • Special reserves • Actual earnings
Tier Two • Undisclosed Reserves • Asset Revaluations • General Provisions / General Loan Loss Reserves • Hybrid Capital Instruments • Subordinated Term Debt	• Cumulative preference shares • 50 per cent capitalisation of specified revaluation reserves (Secondary unimpaired reserves funds) • 50 per cent from revaluation of assets • General provisions • Premiums on the issue of cumulative preference shares • Subordinated term debt
Less: Investments in unconsolidated banking and financial subsidiary companies Investments in capital of the banks and financial institutions (at discretion of national authorities)	Less: Items not charged to profit[1]
Total to be applied in formula	Total to be applied in formula

Source: *KPMG 1995(b)*.

[1] The following items must be deducted if not already charged against capital: depreciation of assets; the South African Reserve Bank has to satisfy itself that provisions for bad and doubtful debts are adequate; operating and accumulated losses, including accumulated depreciation and bad debts not yet written off; establishment costs; costs in respect of organisation and extension of business; excess purchase price arising on the purchase of a business or goodwill; underwriting commission paid. In addition the following items are regarded as 'impairments' to capital: the value of assets lodged or pledged to secure liabilities where such liabilities are not included in the calculation and where the effect of lodging or pledging is that such assets are not available for the purposes of meeting the liabilities of the Bank; the book value of shares and debentures (which rank as secondary capital of that other bank) held by a bank in any other bank; any amount made available by the bank for the purpose of permanent funding of the capital requirements of any of its foreign branches; the amount by which the required capital holding of a foreign subsidiary exceeds issued primary and secondary share capital and unimpaired reserve funds of that foreign subsidiary i.e. capital shortages of subsidiary banks. By applying these deductions to the sum of Tier One and Tier Two Capital, the Banks Act is being more conservative than the BIS guidelines as Tier Two Capital may not exceed 50 per cent of the total amount that a bank is required to maintain. Unlike the BIS guidelines, the Banks Act does not deduct goodwill from Tier One Capital but requires it to be deducted from the sum of Tier One and Tier Two Capital if not already deducted from profits.

Appendix VIII: Comparison between BIS and South African Banks Act Risk-weightings of On-Balance Sheet Items

BIS		Banks Act
	Money	
0 per cent	Bank notes, subsidiary coin, gold coin and bullion	0 per cent
	Investment Deposits, Loans and Advances	
20 per cent	• Intragroup advances to banks	0 per cent
	• Inter bank funding:	
20 per cent	• Domestic bank, mutual building societies and banks in OECD	20 per cent
	• Banks in non - OECD countries	
20 per cent	• Residual maturity up to 12 months	20 per cent
100 per cent	• Residual maturity more than 12 months	50 per cent
20 per cent	• Concluded with Land Bank	10 per cent
	• Concluded with public sector bodies in RSA	10 per cent
	• Public sector bodies in countries in common monetary area	20 per cent
	• Concluded with governments of Botswana, Lesotho, Swaziland or Namibia	10 per cent
100 per cent	• Other	100 per cent
	Mortgage Loans	
50 per cent	• Secured residential property payable in equal monthly instalments	50 per cent
100 per cent	• Secured non-residential property and residential overdue or residential where value less than outstanding loan	100 per cent
100 per cent	***Redeemable Preference Shares***	100 per cent
	Investments	
100 per cent	• Debentures issued by banks	Impairment
100 per cent	• Other debentures and investments	100 per cent
	Equity	
100 per cent	• Investment in non bank	100 per cent
100 per cent (or impairment)	• Investment in bank	Impairment
100 per cent	***Fixed Assets***	100 per cent
	Other Assets	
0 per cent	• Relating to central government of RSA and OECD countries	0 per cent
10 per cent	• Relating to public sector bodies	10 per cent
100 per cent	• Other	100 per cent
50 per cent	***Remittances in transit***	50 per cent
	Deferred Tax	
	• Deferred tax not arising from an assessed loss	0 per cent
	• Debits on deferred tax account arising from an assessed loss	Impairment
100 per cent	***Other***	100 per cent

Source: *KPMG 1995(b).*

Appendix IX: Comparison between BIS and Banks Act Risk-weightings for Off-Balance Sheet Items

BIS		Banks Act
100 per cent	***Bills endorsed and rediscounted***	100 per cent
	Indemnities and Guarantees	
	• Performance related on behalf of RSA government and public sector bodies and governments in common monetary area	0 per cent
	• Performance related on behalf of RSA banks and banks in OECD countries	10 per cent
	• Lending related	
100 per cent	• Performance related	100 per cent
50 per cent		10 per cent
	Irrevocable Letters of Credit and Irrevocable Unutilised Facilities	
20 per cent	• Letter of credit	
	• Original maturity of up to 3 months	0 per cent
	• More than 3 months	20 per cent
	• Unutilised facilities	
	• Where amounts drawn down during pre-arranged period but only to extent that the bank is committed to advance in the quarter following on the reporting date of the return	50 per cent
0 per cent	• With an original maturity of less than one year	0 per cent
	• To public sector bodies	5 per cent
50 per cent	• With an original maturity of one year and over	50 per cent
50 per cent	***Underwriting exposures***	50 per cent
100 per cent	***Other contingent liabilities***	100 per cent
0 per cent	***Committed Capital Expenditure***	20 per cent
**	***Effective net open position in foreign currency***	100 per cent
0.5 per cent	• - Interest rate contracts	0 per cent
1.0 per cent	• Less than one year	0 per cent
1.0 per cent	• One year and less than two years	0 per cent
	• For each additional year	0 per cent
2.0 per cent	• - Exchange rate contracts	0 per cent
5.0 per cent	• Less than one year	0 per cent
3.0 per cent	• One year and less than two years	0 per cent
	• For each additional year	0 per cent

Source: *KPMG 1995(b).*

REFERENCES

Literature

Absa Bank Limited (1992) Deposit-taking Institutions (banks). In Fourie, L.J.; Falkena, H.B. and Kok, W.J. (eds.) *Fundamentals of the South African Financial System*, Cape Town: Southern.

Act Concerning the Custody and Acquisition of Securities (1937) *Gesetz über die Verwahrung und Anschaffung von Wertpapieren (Depotgesetz)*, Germany, as amended.

Allen, D.A. (1983) *Finance: A Theoretical Introduction*, Oxford: Martin Robertson.

AMR (1983) Directive of the Bundesbank on Minimum Reserves (*Anweisung der Deutschen Bundesbank über Mindestreserven*), *Bundesanzeiger*, Nos. 21 and 27, as amended.

Arrow, K. and Debreu, G. (1954) Existence of an equilibrium for a competitive economy, *Econometrica,* Vol. 22.

Australian Government Publishing Service (1981) *Australian Financial System: Final Report of the Committee of Enquiry* (Campbell Report), Canberra: Australian Government Publishing Service.

Avery, R.B. and Berger, A.N. (1991) Loan Commitments and Bank Risk Exposure, *Journal of Banking and Finance,* Vol. 15, No. 1.

Baltensperger, E. and Dermine, J. (1987) The role of public policy in ensuring financial stability: a cross-country, comparative perspective. In Portes, R. and Swoboda, A.K. (eds.) *Threats to international financial stability*, Cambridge: Cambridge.

Baltensperger, E. and Dermine, J. (1990) European Banking. Prudential and Regulatory Issues. In Dermine, J. (ed.) *European Banking in the 1990s*, Oxford: Blackwell.

Bank for International Settlements (1986) *Recent Innovations in International Banking*, Report by a Study Group established by the Central Banks of the Group of Ten Countries, April.

Bank for International Settlements (1993(a)) *63rd Annual Report*, Basle, June.

Bank for International Settlements (1993(b)) *Proposals for the International Convergence of Capital Measurement and Capital Standards*, Consultative Paper issued by the Committee on Banking Regulations and Supervisory Practices, Basle, December.

Bank of England (1981) Foreign Currency Exposure, *BEQB*, September.

Bank of England (1982) The Measurement of Liquidity, *BEQB*, September.

Bank of England (1984(a)) *Foreign Currency Options*, April.

Bank of England (1984(b)) Supervisory Aspects of Country risk, *BEQB*, June.

Bank of England (1987(a)) *Agreed Proposal: Credit Equivalent Amounts for Interest Rate and Foreign Exchange Related Instruments*, March.

Bank of England (1987(b)) *Large Exposures Undertaken by Institutions Authorised Under the Banking Act* 1987, BSD/1987/1.

Bank of England (1988(a)) *Banking Act 1987, Section 16: Statement of* Principles, May.

Bank of England (1988(b)) *Implementation of the Basle Convergence Agreement in the United* Kingdom, BSD/1988/3.

Bank of England (1988(c)) *Proposals for a Stock of High Quality Liquidity*, Consultative Paper, March.

Bank of England (1988(d)) *Banking Supervision Guide,* BSD/1988/4.

Bank of England (1992(a)) *Implementation in the United Kingdom of the directive on the own funds of credit institutions*, BSD/1992/1.

Bank of England (1992(b)) *Amendment to the Bank's Notice: Implementation in the United Kingdom of the Solvency Ratio Directive*, BSD/1992/3.

Bank of England (1993(a)) *Banking Act 1987, Section 16: Statement of Principles*, May.

Bank of England (1993(b)) *Implementation in the United Kingdom of the Directive on Consolidated Supervision of Credit Institutions*, BSD/1993/1.

Bank of England (1995) The Foreign Exchange Market in London, *BEQB*, November.

Bank of England (1996(a)) Financial Market Developments, *BEQB*, February.

Bank of England (1996(b)) *Monthly Press Release*, May.

Bank of England (1996(c)) *Annual Report under the Banking Act for 1995/96.*

Banking Act (1961) *Gesetz über das Kreditwesen*, Germany, as amended.

Banking Act (1985) *Gesetz über das Kreditwesen*, Germany, as amended.

Banking Act (1987) United Kingdom, as amended.

Banks Act (1990) South Africa, as amended.

Barclay, C., Gardener, E.P.M. and Revell, J. (1978) *Competition and Regulation of Banks*, Bangor Occasional Papers in Economics No. 14, Cardiff: University of Wales.

Basle Committee on Banking Regulation and Supervisory Practices (1982) *Management of Banks' International Lending: Country Risk analysis and Country Exposure Measurement and Control*, Basle.

Basson, D. (1994) Werk Reserwebank se filosofie?, *Finansies en Tegniek*, 21 January.

Basson, D. (1996) 'n Voorbeeld van banke gemaak, *Finansies en Tegniek*, 2 August.

Batchelor, R.A. and Fitzgerald, M.D. (1982) The Regulation of Financial Markets and Financial Institutions. In Göpp, H. and Henn, R. (eds.) *Geld, Banken und Versicherungen*, Vol. II, Karlsruhe.

Baumol, W.K. (1982) Contestable markets: an uprising in the theory of industry structure, *American Economic Review,* Vol. 72.

Baums, T. and Gruson, M. (1993) The German Banking System - System of the Future, *Brooklyn Journal of International Law*, Vol. 19.

Baxmann, U.G. (1990) Zur Bewertung risikobehafteter Auslandsforderungen mittels Sekundarmarktpreisen, *Zeitschrift für Betriebswirtschaft*, May-June.

Benson, L. (1994) American bank regulation: Four in one can go, *The Economist*, 5 March.

Benston, G.J. (1983) Deposit Insurance and Bank Failures, *Economic Review*, Federal Reserve Bank of Atlanta.

Bensten, G.J. (1987) Federal Regulation of Banking: Analysis and Banking. In Fraser, D.R. and Rose, P.S. (eds.) *Financial Institutions and Markets in a Changing World*, Homewood: BPI.

Benston, G.J. and Kaufman, G.G. (1996) The appropriate role of bank regulation, *The Journal of the Royal Economic Society*, Vol. 106, No. 436.

Berger, A.N. and Udell, G.F. (1990) Collateral, Loan Quality, and Bank Risk, *Journal of Monetary Economics,* Vol. 25, No. 1.

Bernanke, B.S. (1983) Non-monetary effects of the financial crisis in the propagation of the Great Depression, *American Economic Review*, Vol. 73.

Bernanke, B.S. and Gertler, M. (1985) Banking in General Equilibrium, *NBER Working Paper*, No. 1674.

Bernstein, P.L. (1996) The New Religion of Risk-management, *Harvard Business Review*, March - April.

BGB (1968) *Burgerliches Gesetzbuch*, Germany, as amended.

BGBl (1972) *Gesetz über Bausparkassen*, Germany, as amended.

Bhatacharya, S. (1982) Aspects of Monetary and Banking Theory and Moral Hazard, *Journal of Finance*, Vol. 37.

Black, B.S. and Coffee, J.C. (1994) Hail Brittania - Institutional Investor Behaviour under Limited Regulation, *Michigan Law Review*, Vol. 92, No. 7.

Booysen, S. (1991) Openbaarmakingsvereistes vir depositonemende instellings - standpunt of riglyn, *Rekeningkunde SA*, Vol.8, No. 10.

Brash, D. (1994) Shifting the onus for supervision to banking bosses, *Business Day*, 20 July.

Brinkmann, E.J. and Horvitz, P.M. (1995) Risk-Based Capital Standards and the Credit Crunch, *Journal of Money, Credit and Banking*, Vol. 27, No. 3.

Broadway, D.J. (1994) *Lessons For Management From Recent Bank Failures*, Research Report submitted for partial fulfillment of the degree MBA, University of Witwatersrand.

Brümmerhof, W. (1988) *Finansieringsaktiwiteite van Bankinstellings wat nie in hulle balansstate verskyn nie: 'n Kritiese ontleding van heersende bankpraktyke and die implikasie vir banktoesigowerhede in die RSA en enkele Westerse lande*, Proefskrif ingelewer vir die graad Doktor in die Ekonomie aan die Universiteit van Stellenbosch.

Bryan, L.L. (1991) A Blueprint for Financial Reconstruction, *Harvard Business Review*, May - June.

Bundesbank Act (1957) *Gesetz über die Deutsche Bundesbank*, Germany, as amended.

Bundt, T.P.; Cosimano, T.F. and Hollovan, J.A. (1992) DIDMCA and Bank Market Risks: Theory and Evidence, *Journal of Banking and Finance,* Vol. 16, No. 6.

Business Day (1994) *Banks' risk to be monitored*, 24 January.

Business Day (1995) *Bank plan to fight money laundering*, 16 January.

Business Day (1996) *Banking in Southern Africa*, Business Day Survey, August.

Cade, E.C. (1987) *Managing banking risks in an uncertain future*, Seminar, Institute of Bankers in South Africa, 15 October.

Campbell, K. (1985) Financial Futures and Options: Their Uses and Abuses, *The Banker*, May.

Carmichael, J. and Davis, P. (1991) The relevance of portfolio theory to risk-management in financial institutions. In Davis, K. and Harper, I. (eds.) *Risk-management in Financial Institutions*, North Sydney: Allen and Unwin.

Carse, D. (1996) The evolving international approach to supervising risk-management, *Journal of Lending and Credit Risk-management*, Vol. 78, No. 7.

Casson, P. (1996) Basle Committee publishes new report on 'Herstatt risk', *Financial Regulation Report*, May.

Chan, Y. Greenbaum, S.I. and Thakor, A.V. (1992) Is Fairly Priced Deposit Insurance Possible?, *The Journal of Finance*, Vol. 47, No. 1.

Chant, J. (1992) The New Theory of Financial Intermediation. In Dowd, K. and Lewis, M.K. (eds.) *Current Issues in Financial and Monetary Economics*, London: Macmillan.

Chari, V.V. (1989) Banking without Deposit Insurance or Bank Panics: Lessons from a model of the U.S. National Banking System, *Federal Reserve Bank of Minneapolis Quarterly Review*, Vol. 13, No. 3.

Chick, V. (1979) *The Theory of Monetary Policy*, Oxford: Parkgate.

Clark, R. (1976) The Soundness of Financial Intermediaries, *The Yale Law Journal,* Vol. 86, No. 1.

Cooper, K.; Kolari, J. and Wagster, J. (1991) A Note on the Stock Market Effects of the Adoption of Risk-based Capital Requirements on International Banks in Different Countries, *Journal of Banking and Finance*, Vol. 15, No. 2.

Cornett, M.M. and Tehranian, H. (1992) Changes in Corporate Performance Associated with Bank Acquisitions, *Journal of Financial Economics*, Vol. 31, No. 2.

Dale, R. (1982) *Bank Supervision Around the World*, Group of Thirty, New York.

Dale, S. and Haldane, A. (1993) Bank behaviour and the monetary transmission mechanism, *BEQB*, November.

Daskin, A.J.; Kriesler, P. and Owen, A.D. (1984) The Separation of Banking and the Securities Business: A View of the United Kingdom, West Germany and Japan, *World of Banking*, Vol. 3, No 3.

Davies, S.M. and McManus, D.A. (1991) The Effects of Disclosure Policies on Bank Risk-Taking, *Journal of Banking and Finance,* Vol. 15, Nos. 4-5.

Davis, K. (1990) Assessing Financial Institution Risk. In Johnson, M. (ed.) *Contemporary Issues in Australian Economics*, London: Macmillan.

Davis, K. and Harper, I. (1991) (eds.) *Risk-management in Financial Institutions*, North Sydney: Allen and Unwin.

De Long, B. (1988) Productivity Growth, Convergence, and Welfare: Comment, *American Economic Review*, Vol. 78, No.5.

De Swardt, C.J. (1987) The Role of Banking Supervision in South Africa in the Changing World of Banking, *The Securities Markets*, Vol. 6.

De Swardt, C.J. (1994(a)) Addressing the Problems of Regulation, Supervision and Restructuring of Regulatory Institutions and Guarding Against Systemic Risk. Presentation at the *1994 Banking Industry Conference*, Sandton, 2 - 3 February.

Dean, J.W. and Giddy, I.H. (1981) *Averting international banking crisis*, Monograph, New York: Solomon Brothers.

Deutsche Bundesbank (1993) Banking Act of the Federal Republic of Germany, *Deutsche Bundesbank Special Series*, No. 2.

Deutsche Bundesbank (1996) *Monthly Reports*, Vol. 48. No 1.

Di Cagno, D. (1990) *The Regulation of Banks*, Aldershot: Gower.

Diamond, D.W. (1984) Financial intermediation and delegated monitoring, *Review of Economic Studies*, Vol. 51.

Diamond, D.W. and Dybvig, P. (1983) Bank runs, deposit insurance and liquidity, *Journal of Political Economy,* Vol. 91.

Diamond, D.W. and Verrecchia, R.E. (1991) Disclosure, Liquidity, and the Cost of Capital, *The Journal of Finance*, Vol. 46, No. 4.

Dimson, E. and Marsch, P. (1994) *The Debate on International Capital Requirements*, Corporation of London.

Dooley, M. (1987) Comment. In Lessard, D. and Williamson, J. (eds.) *Capital Flight and Third World Debt*. Washington, DC: Institute for International Economics.

Dooley, M.P. and Isard, P. (1980) Capital Controls, Political Risk, and Derivatives from Interest Rate Parity, *Journal of Political Economy*, Vol. 88, No. 2.

EconLit CD-Rom (1996) Citations with selected abstracts of the world's economic literature compiled from the American Economic Association's *Journal of Economic Literature,* Silver Platter Information.

Ed Hern Rudolph Inc (1992) *The Jacobs Report - A short summary*, 23 November.

Edwards, G.T. (1987) *The Role of Banks in Economic Development*, London: Macmillan.

Edwards, J. and Fischer, K. (1994) *Banks, Finance and Investment in Germany*. Cambridge University Press: Cambridge.

Eisenbeis, R.A. (1987) Eroding market imperfections - Implications for financial intermediaries, the payment system and regulatory reform, *Symposium on Restructuring the Financial System,* Kansas City: Federal Reserve Bank.

Eisenhower, J.G. (1994) Household Use of Open-End Credit to Finance Risk, *Journal of Consumer Affairs*, Vol. 28, No 1.

Fair Trading Act (1973) United Kingdom, as amended.

Falkena, H.B. (1992) The regulatory structure of the South African financial system. In Fourie, L.J.; Falkena, H.B. and Kok, W.J. (eds.) *Fundamentals of the South African Financial System*, Cape Town: Southern.

Falkena, H.B. (1994) *Financial Regulations in South Africa*, Johannesburg: Penrose.

Fama, E. (1980) Banking theory of finance, *Journal of Monetary Economics,* Vol. 6.

Faure, A.P. (1976) *The Liability and Asset Portfolio Management Practices of the South African Money Market Institutions and their Role in the Financial System*, Thesis presented for the Degree PhD (Economics), University of Stellenbosch.

Faure, A.P. (1992(a)) Elements of the South African financial system. In Fourie, L.J.; Falkena, H.B. and Kok, W.B. (eds.) *Fundamentals of the South African Financial System*, Cape Town: Southern.

Faure, A.P. (1992(b)) *Financial Services in South Africa*, Cape Town: Lafferty.

FBSO (1967) Regulation on the Forms for the Layout of the Annual Financial Statements of Banking Institutions (*Verordnung über Formblätter für die Gliederung des Jahresabschlusses von Kreditinstitute*), as amended.

FBSO (1968) Guidelines of the FBSO for the Contents of the Audit Reports on the Annual Financial Statements of Banking Institutions (*Richtlinien für den Inhalt der Prüfüngsberichte zu den Jahresabschlussen der Kreditinstitute*), Germany, as amended.

FBSO (1970) Announcement of the Banking Supervisory Authority Concerning the Method, Scope and Timing of the Securities Deposit Audit (*Bekanntmachung über Art, Umfang und Zeitpunkt der Depotprüfung - Richtlinien für die Depotprüfung*), Germany, as amended.

FBSO (1985) Regulation Regarding Information with respect to Credits of Foreign Borrowers pursuant to the Banking Act (*Verordnung über Angaben zu den*

Krediten an Ausländischen Kreditnehmer nach dem Gesetz über das Kreditwesen, Germany, as amended.

FEE (1993) *Survey on the Involvement of the Auditor in the Prudential Control of Banks by the Supervisory Authorities*, Fédération des Experts Comptables Européens.

Felgran, S. (1988) Interest Rate Swaps: Use, Risk and Prices, *New England Economic Review*, December.

Finance Week (1992) *Warts and all - The Masterbond judicial commission's terms of reference cover all angles*, 11 June.

Finance Week (1994) *On Margin*, 4 May.

Finance Week (1996) *In the wings*, 18 April.

Financial Mail (1993) *Commercial Paper: more heat than light*, 19 February.

Financial Mail (1995(a)) *African Bank - A thin line*, 22 September.

Financial Mail (1995(b)) *African Bank - Moral hazard versus investor protection,* 15 September.

Financial Mail (1996(a)) *Credit Derivatives - Ignoramuses, Beware*, 12 April.

Financial Mail (1996(b)) *South African Reserve Bank - Moving into the Future*, Survey, 23 August.

Financial Mail (1996(c)) *Sun Multiserve - Adapt or Die*, 26 January.

Financial Services Act (1986) United Kingdom, as amended.

Financial Times (1995) Information Technology Review, *Risk Issues now a high priority*, 5 April.

Finansies en Tegniek (1994) *Is 'n finansiële ramp op pad?*, 4 March.

Finansies en Tegniek (1995) *Die Reserwebank se keuses en waarom banke misluk*, 29 September.

Finansies en Tegniek (1996) *Die vermoë om te onderskei*, 13 September.

Francke, H.-H. and Hudson, M. (1984) *Banking and Finance in West Germany*, Kent: Croom Helm.

Frankel, A.B. (1984) Interest Rate Futures: An Innovation in Financial Techniques for the Management of Risk, BIS, *Economic Papers*, No. 12.

Freeman, S. (1988) Banking and the provision of liquidity, *Journal of Business*, Vol. 61.

French, G.E. (1992) Corrective Action for Troubled Banks, *Contemporary Policy Issues*, Vol. 10, No. 4.

Friedman, M. (1969) *The Optimum Quantity of Money and Other Essays*, Chicago: Aldine.

Froot, K.A.; Scharfstein, D.S. and Stein, J.C. (1994) A Framework for Risk-management, *Harvard Business Review*, November - December.

Furlong, F.T. (1988) Changes in Bank Risk-Taking, *Federal Reserve Bank of San Francisco Economic Review,* No. 2.

Furlong, F.T. and Keeley, M.C. (1991) Capital Regulation and Bank Risk-Taking: A Note, *Federal Reserve Bank of San Fransisco Economic Review,* No. 3.

Gardener, E.P.M. (1986) A general perspective of banking prudential regulation. In Gardener, E.P.M. (ed.) *UK Banking Supervision: Evolution, Practice and Issues*, London: Allen & Unwin.

Gardener, E.P.M. (1988) Innovation and New Structural Frontiers in Banking. In Arestis, P. (ed.) *Contemporary Issues in Money and Banking*, London: Macmillan.

Gardener, E.P.M. (1991) International Bank Regulation and Capital Adequacy. In Norton, J.J. (ed.) *Bank Regulation and Supervision in the 1990s*, London: Lloyd's of London Press.

Gelles, G.M. (1991) Some Regulatory Determinants of Bank Risk Behaviour: Comment, *Journal of Money, Credit and Banking,* Vol. 23, No. 1.

Genotte, G.M. and Pyle, D. (1991) Capital Controls and Bank Risk, *Journal of Banking and Finance*, Vol. 15, Nos. 4-5.

George, E. A. J. (1993) *The Pursuit of Financial Stability*, The Second Bank of England/ LSE Lecture at the London School of Economics, 18 November.

Germany, J.D. and Morton, J.E. (1987) Financial Innovation and Deregulation in Foreign Industrial Countries. In Fraser, D.R. and Rose, P.S. (eds.) *Financial Institutions and Markets in a Changing World*, Homewood: BPI.

Gertler, M. (1988) Financial Structure and Aggregate Economic Activity, *Journal of Money, Credit and Banking*, Vol. 20, No. 3.

Giammarino, R.; Schwartz, E. and Zechner, J. (1989) Market Valuation of Bank Assets and Deposit Insurance in Canada, *Canadian Journal of Economics*, Vol. 22, No. 1.

Gibson, H.D. (1989) *The Eurocurrency Markets, Domestic Financial Policy and International Instability*, Oxford: Macmillan.

Gilbert, R.A. (1990) Market Discipline of Bank Risk: Theory and Evidence, *Federal Reserve Bank of St. Louis Review,* Vol. 72, No. 1.

Gilbert, R.A. (1992) The Effect of Legislating Prompt Corrective Action on the Bank Insurance Fund, *Federal Reserve Bank of St. Louis Review*, Vol. 74, No. 4.

Goldberg, L.G. (1991) Risk-Taking Incentives of Banks and Risk-Adjusted Deposit Insurance, *Journal of Financial Research*, Vol. 14, No. 3.

Goldberg, L.G. (1993) Prospects for Banking Structure and Competition in Europe after 1992, *Journal of Multinational Financial Management*, Vol. 2.

Goldsmith, R.W. (1969) *Financial Structure and Development,* New Haven: Yale University.

Goldsmith, R.W. (1985) *Comparative national balance sheets: a study of twenty countries, 1688-1978*, Chicago: University of Chicago.

Goodhart, C.A.E. (1989) *Money, Information and Uncertainty*, London: Macmillan.

Goodhart, C.A.E. (1995) *The Central Bank and The Financial System*, London, Macmillan.

Goodwin, R.M. (1982) *Essays in Dynamic Economics*. London: Macmillan.

Gowland, D. (1991)*The Regulation of Financial Markets in the 1990s*, York: Edward Elgar.

Goyeau, D. and Tarazi, A. (1992) Evaluation du risque de defaillance bancaire en Europe. (An Empirical Investigation of Bank Risk in Europe), *Revue d'Economique Politique*, Vol. 102, No. 2.

Grabbe, J.O. (1986) *International Financial Markets*. New York: Elsevier.

Group of Thirty (1982) *Risks in International Bank Lending*, New York.

Gurley, J.G. and Shaw, E.S. (1970) *Money in a Theory of Finance*, Washington: Brookings Institute.

Habscheid, E. (1988) *Staatshaftung für fehlsame Bankenaufsicht? - Zu den Grenzen der Regelungsbefügnis des Gesetzgebers*, Bielefeldt: Ernst und Werner Gieseking.

Hall, M.J.B. (1987) *Financial Deregulation - A Comparative Study of Australia and the United Kingdom*, London: Macmillan.

Hall, M.J.B. (1989) *Handbook of Banking Regulation and Supervision*, Cambridge: Woodhead-Faulkner.

Hall, M.J.B. (1991) Financial Regulation in the United Kingdom: Deregulation or Reregulation. In Green, C. J. and Llewellyn, D.T. (eds.), *Surveys in Monetary Economics*, Oxford: Blackwell.

Hall, M.J.B. (1993) *Banking Regulation and Supervision - A Comparative Study of the UK, USA and Japan*, Aldershot: Edward Elgar.

Handelsblatt (1994) *Kreditwesengesetz - Ausschuss verabschiedete Novelle*, 18 June.

Harrington, R. (1991) The London Financial Market. In Green C.J. and Llewellyn, D.T. (eds.) *Surveys in Monetary Economics*, Oxford: Blackwell.

Hartmann, P. (1994) Foreign Exchange Risk Regulation: Issues for Industrial and Developing Countries, *International Monetary Fund Working Paper*, December.

Heilbroner, R.L. (1980) *The Worldly Philosophers: The lives, times and ideas of the great economic thinkers*, New York: Touchstone.

Helwig, M.F. (1995) Systemic Aspects of Risk-management in Banking and Finance. In *Schweizerische Zeitschrift für Volkswirtschaft und Statistik*, Vol. 131, No. 4/2.

Herring, R.J. and Litan, R.L. (1995) *Financial Regulation in the Global Economy*, Brookings: Washington.

Hester, D.D. (1994) On the theory of financial intermediation, *Economist - Leiden*, Vol. 142, No. 2.

HGB (1970) *Handelsgesetzbuch*, Germany, as amended.

HMSO (1985) *Report of the Committee set up to consider the System of Banking Supervision*, London: Her Majesty's Stationary Office.

HMSO (1992) *Inquiry into the Supervision of the Bank of Credit and Commerce International*, House of Commons, London: Her Majesty's Stationary Office.

Hogan, W.P. and Sharp, I.G. (1988) Market discipline, risk and bank prudential regulation and supervision in Australia. *CAER Paper Series*, Australia: University of New South Wales.

Hoover, F.R. and Mishkin, F.S. (1994) The Decline of Traditional Banking: Implications for Financial Stability and Regulatory Policy, *Columbia Paine Webber Working Paper Series in Money, Economics and Finance*, New York.

Horvitz, P.M. (1987) Reorganization of the Financial Regulatory Agencies. In Fraser, D.R. and Rose, P.S. (eds.) *Financial Institutions and Markets in a Changing World*, Homewood: BPI.

Howard, K. and Sharp, J.A. (1986) *The Management of a Student Research Project*, Aldershot: Gower.

Hudgson, D. (1994) Depositor Protection in South Africa. Contribution to the Workshop organised by the SARB: *Investor Protection in South Africa - Deposit Insurance or Not?,* Pretoria, September.

Humphrey, T.M. (1975) The classical concept of lender of last resort, *Economic Review*, Federal Reserve Bank of Richmond, Vol. 75, No. 2.

Hurst, A. (1994) *Developing and Extending the Concept of Community Banking*, Presentation delivered at The 1994 Banking Industry Conference, Sandton, Johannesburg, 2-3 February.

IFAC (1989) *The Relationship Between Bank Supervisors and External Auditors*, International Federation of Accountants Auditing Statement, No. 4.

Igawa, K. and Konatas, G. (1990) Asymmetric Information, Collateral and Moral Hazard, *Journal of Financial and Quantitative Analysis*, Vol. 25, No. 4.

Investment Business Advisory Committee (1995) *Regulation of Investment Services in the Non-Securities Field*, Discussion Paper, 7 June.

Investment Companies Act (1970) *Gesetz über die Kapitalanlagegesellschaften*, Germany, as amended.

Isimbaki, M.J. (1994) The Stock-Market Perception of Industry Risk and the Separation of Banking and Commerce, *Journal of Banking and Finance*, Vol. 8, No. 2,

Ivor Jones & Roy (1995) *Should Liberty drop its standards*, 7 December.

Jacklin, C.J. and Bhattacharya, S. (1988) Distinguishing panic and information-based bank runs: welfare and policy implications, *Journal of Political Economy*, Vol. 96.

Jacobs Report (1992) Report of the Committee of Investigation into the Promotion of Equal Competition for Funds in Financial Markets in South Africa, South African Reserve Bank Pretoria.

Jacobs, A.S. (1983) *Recent Developments in South African Banking and their Implications for Monetary Policy and Banking Supervision*, Address at the Bank of England Conference on the Implications of Developments in Monetary Systems, London.

Jacobs, A.S. (1987) *The Changing Role of Banks in the South African Financial System*, Address at a Seminar of the Institute of Bankers in South Africa, Pretoria, 15 October.

Jacobs, A.S. (1995) Comment on the White Paper: A New Housing Policy and Strategy for South Africa.

James, C. (1991) The Losses Realized in Bank Failures, *The Journal of Finance*, Vol. 46, No. 4.

Kambhu, J. (1990) Concealment of Risk and Regulation of Bank Risk Taking, *Journal of Regulatory Economics*, Vol. 2, No. 4.

Kane, E.J. (1986) Appearance and Reality in Deposit Insurance - The Case for Reform, *Journal of Banking and Finance*, Vol. 10, No. 2.

Kane, E.J. (1987) Competitive financial reregulation: an international perspective. In Portes, R. and Swoboda, A.K. (eds.) *Threats to international financial stability*, Cambridge: Cambridge.

Kareken, J.H. and Wallace, N. (1978) Deposit insurance and bank regulation: a partial equilibrium exposition, *Journal of Business*, Vol. 51, No. 3.

Kaufman, G.G. (1991), *Banking Structures in Major Countries*, Boston: Khumer.

Keen, S. (1995) Finance and economic breakdown: modelling Minsky's 'financial instability hypothesis.', *Journal of Post Keynesian Economics*, Vol. 17, No. 4.

Kelly, G.W. (1988) Some Regulatory Determinants of Bank Risk Behaviour: Comment, *Journal of Money, Credit and Banking,* Vol. 20, No. 2.

Kelly, M.V. (1993) *Financial Institutions in South Africa - Financial, Investment and Risk-management*, Kenwyn: Juta.

Keynes, J.M. (1924) *The Nation and Athenaeum*, May 17.

Keynes, J.M. (1936) *The General Theory of Employment, Interest and Money*, London: Macmillan.

King, K.K. and O'Brien, J.M. (1991) Market-Based, Risk-Adjusted Examination Schedules for Depository Institutions, *Journal of Banking and Finance*, Vol. 15, No. 4.

Kitchen, R.L. (1986) *Finance for the Developing Countries*, John Wiley: Singapore.

Kloten, N. (1988) The Impact of Innovations and Globalisation of Financial Markets on Monetary Policy: The German Case. In Arestis, P. (ed.) *Contemporary Issues in Money and Banking*, London: Macmillan.

Kluger, B.D. (1989) Auditor Changes, Information Quality and Bankruptcy Prediction, *Managerial and Decision Economics*, Vol. 10, No. 4.

Koseff, S. (1984) *Bank Failure in South Africa*, Research Report presented to the Graduate School of Business, University of Witwatersrand, in partial fulfilment of the Requirements for the Master of Business Administration Degree, 1984.

KPMG (1990) *The Deposit-taking Institutions Act - An Executive's Guide.*

KPMG (1995(a)) Important Regulatory Issues - South Africa, *Banking and Finance South Africa.*

KPMG (1995(b)) *KPMG Banking Survey 1995.*

KPMG (1996) *Fighting Fraud*, Vol. 4.

Langohr, H. and Santomero, A.M. (1985) The Extent of Equity Investment by European Banks, *Journal of Money, Credit and Banking*, Vol. 17, No. 2.

Leeson, N. with Whitley, E. (1996) *Rogue Trader*, London: Little Brown.

Leichtfuss, R. and Simon, U. (1995) Why banking is cheaper for UK and German customers, *McKinsey Quarterly*, Vol. 2.

Leland, H. and Pyle, D. (1977) Informational Asymmetries, Financial Structure and Financial Intermediation, *Journal of Finance*, Vol. 32.

Levich, R.M. (1990) The Euromarkets after 1992. In Dermine, J. (ed.) *European Banking in the 1990s*, Oxford: Blackwell.

Levonian, M.E. (1991) Have Large Banks Become Riskier? Recent Evidence from Option Markets, *Federal Reserve Bank of San Francisco Economic Review*, No. 4.

Lewin, L. (1991) *Self-Interest and Public Interest in Western Politics..*

Lewis, M.K. and Davis, K.T. (1987) *Domestic and International Banking,* Oxford: Philip Allan.

Liebenberg, P. (1994) A Future financed by unpayable debt is one built one sand, *Business Day*, 15 July.

Llewellyn, D.T. (1986) *Regulation and Supervision of Financial Institutions*, London: Institute of Bankers.

Llewellyn, D.T. (1987) Competition and the regulatory mix, *National Westminster Bank Review*, August.

Llewellyn, D.T. (1991(a)) *Competition or Credit Controls?* London: Institute of Economic Affairs, Hobart Paper No. 117.

Llewellyn, D.T. (1991(b)) Structural Change in the British Financial System. In Green, C.J. and Llewellyn, D.T. (eds.), *Surveys in Monetary Economics*, Oxford: Blackwell.

Llewellyn, D.T. (1992) Philosophy, objectives and principles of financial regulation. In Fourie, L.J.; Falkena, H.B. and Kok, W.J. (eds.) *Fundamentals of the South African Financial System*, Cape Town: Southern.

Llewellyn, D.T. (1995(a)) Market Imperfections and the Targets-Instrument Approach to Financial Services Regulation, *Service Industries Journal*, Vol. 15, No. 2.

Llewellyn, D.T. (1995(b)) The future business of banking, *Banking World*, Vol. 30.

Lomax, D. (1987) *London Markets after the Financial Services Act*, London: Butterworths.

Lusser, M. (1987) Policy and financial innovation: will there be a switch from deregulation to reregulation? In Portes, R. and Swoboda, A.K. (eds.) *Threats to international financial stability*, Cambridge: Cambridge.

Maisel, S.J. (1981) (ed.) *Risk and Capital Adequacy in Commercial Banks*, New York: National Bureau of Economic Research.

Marais, N.F. (1991) *Determining the optimal balance between self-regulation and prudential regulation in the South African banking sector*, D.Com.-Thesis, University of South Africa.

Martin, P. (1985) Statement before the Subcommittee on Telecommunications, Consumer Protection and Finance of the Committee on Energy and Commerce, US House of Representatives, 2nd May 1985, *Federal Reserve Bulletin*, July.

Mayer, C. (1990) The Regulation of Financial Services: Lessons from the United Kingdom. In Dermine, J. (ed.) *European Banking in the 1990s*, Oxford: Blackwell.

Mayer, C. (1993) Lessons from the UK. In Dermine, J (ed.) *European Banking in the 1990s*, Oxford: Blackwell.

McCarthy, C.L.M. (1988) *Monetêre Ekonomie - 'n Suid-Afrikaanse Perspektief*, Pretoria: HAUM.

McConnochie, A. (1995) Industry Overview - South Africa, *KPMG Banking Survey 1995.*

Mei, J. (1994) Frontiers of Real Estate Finance: Risk, Valuation and Market Timing, *Financial Markets, Institutions and Investments*, Vol. 3, No 5.

Meijer, J.H. (1992) Instruments of Monetary Policy. In Fourie, L.J.; Falkena, H.B. and Kok, W.J. (eds.) *Fundamentals of the South African Financial System*, Cape Town: Southern.

Meister, E. and Hofman, G. (1994) Mindestreserve fit gemacht für Europa, *Zeitschrift für das gesamte Kreditwesen*, Vol. 5.

Melamet Report (1993) Report of the Committee of Enquiry into the feasibility of a holistic approach for financial supervision of financial institutions, financial services and deposit-taking institutions, and enabling legislation for the regulation of the activities of persons who are not currently regulated or under sufficient financial supervision and who act as intermediaries or advisors in respect of financial services to the public, Johannesburg.

Meltzer, A.H. (1967) Major Issues in the Regulation of Financial Institutions, *Journal of Political Economy*, Vol. 75.

Merton, R.C. (1995) A functional perspective of financial intermediation, *Financial Management*, Vol 24, No. 2.

Metais, J. (1989) Towards a restructuring of the international financial services industry. In Gardener, E.P.M. (ed.), *The Future of Financial Systems and Services*, London: Macmillan.

Metcalfe, B. (1996) *Foreign Banking in South Africa - Strategic Directions toward the Next Millenium*, Price Waterhouse, South Africa.

Metcalfe, J.L. (1986) Self-Regulation, Crisis Management and Preventive Medicine: the Evolution of UK Bank Supervision. In Gardener, E.P.M. (ed.) *UK Banking Supervision - Evolution, Practice and Issues*, London: Allen & Unwin.

Minsky, H. (1975) Financial Resources in a fragile financial environment, *Challenge,* Vol. 18, No. 3.

Mitchell, D.W. (1991) Some Regulatory Determinants of Bank Risk Behaviour: Reply, *Journal of Money, Credit and Banking,* Vol. 23, No. 1.

Moore, B.J. (1989) *Horizontalists and Verticalists: The macroeconomics of credit money*, Cambridge: Cambridge.

Moore, B.J. and Schoombee, G.A. (1993) *Bank Credit to the Informal Sector: Challenge and Reward*, Revised version of a paper read at the Biennial Conference of The Economic Society of South Africa, University of Pretoria, Pretoria, 11 - 12 October.

Müller, H. (1993) Die Deutsche Bankenaufsicht, *Zeitschrift für das gesamte Kreditwesen*, Vol. 17.

Mullineux, A.W. (1987) *U.K. Banking after Deregulation*, London: Croom Helm.

Naisbitt, B. (1995) The Monetary and Financial System, *Banking World*, Vol. 13, No. 3.

Neven, D.J. (1990) Structural Adjustment in European Retail Banking: Some Views from Industrial Organization. In Dermine, J. (ed.) *European Banking in the 1990s*, Oxford: Blackwell.

Newlyn, W.T. (1971) *Theory of Money*, Oxford: Clarendon.

Norton, J.J. (1995) *Devising International Bank Supervisory Standards*, London, Graham and Trotman.

OECD (1983) *The Internationalisation of Banking - The Policy Issues*, Paris: OECD.

OECD (1987) *Prudential Supervision in Banking*, Paris: OECD.

OECD (1989) *Competition in Banking,* Paris: OECD.

Oelkers, F. (1995) *Central bank law in Germany and South Africa: A comparative study of the Bundesbank Act and the South African Reserve Bank Act, including liability in banking supervision*, Thesis submitted in partial fulfilment of the requirements for the degree LLM, University of Cape Town, Cape Town.

Ogus, A. (1994) *Regulation: Legal Form and Economic Theory*, London: Oxford.

Ollila, E. (1989) The Role of Financial Markets in the Adjustment Process: The Finnish Experience. In Fair, D.E. and De Boissieu, C. (eds.) *The International Adjustment Process - New Perspectives, Recent Experience and Future Challenges for the Financial System,* Dordrecht: Kluwer.

Oosthuizen, C.L. (1994(a)) *An Overview: Financial Risk-management in the Banks Act and Regulations*, Presentation delivered at The 1994 Banking Industry Conference, Sandton, Johannesburg, 2-3 February.

Oosthuizen, C.L. (1994(b)) Bank Failure - A Bank Supervision Perspective. Contribution to the Workshop organised by the SARB*: Investor Protection in South Africa - Deposit Insurance or Not?* September, Pretoria.

Own Funds Directive (1989) The Council Directive of 1989 on The Own Funds of Credit Institutions, European Community, 89/299.

Parry, R.T. (1992) A Central Banker's Perspective on Bank Reform, *Business Economics*, Vol. 37, No. 2.

Peltzman, S. (1976) Towards a More General Theory of Regulation, *Journal of Law and Economics*, Vol. 19, No. 2.

Penn, G. (1989) *Banking Supervision - Regulation of the UK Banking Sector under the Banking Act 1987*, London: Butterworths.

Phillips, S.M. (1993) *The Burdens and Opportunities in the Banking Regulatory Environment*, Remarks before the Annual Mid-winter Meeting of the New York State Bankers Association in Washington on 28 January.

Pierce, D.G. and Tysome, P.J. (1985) *Monetary economics: theories, evidence and policy*, London: Butterworths.

Pieterse, A. (1994) *Trends Towards Bank Disintermediation*, Presentation delivered at The 1994 Banking Industry Conference, Sandton Holiday Inn, Johannesburg, 2-3 February.

Podolski, T.M. (1986) *Financial Innovation and the Money Supply*, Oxford: Basil Blackwell.

Policy Board for Financial Services and Regulation (1996) *Regulation of Retail Investment Services in South Africa*, Consultative Paper.

Polizatto, V.P. (1990) *Prudential Regulation and Banking Supervision - Building an Institutional Framework for Banks*, Background Paper for the 1989 World Development Report, Washington: The World Bank.

Postlewaite, A. and Vives, X. (1987) Bank Runs as an Equilibrium Phenomenon, *Journal of Political Economy*, Vol. 95, No. 3.

Pozdena, R.J. and Alexander, V. (1991) Bank Structure in West Germany. In Kaufman, G.G. (ed) *Banking Structures in Major Countries*, London: Kluwer.

Price Waterhouse (1995) *South Africa - International Banking*, Johannesburg.

Principles Concerning the Capital and Liquidity of Banks (1969) *Grundsätze über das Eigenkapital und die Liquidität der Kreditinstitute*, Germany, as amended.

Prywes, M. (1992) The Good Work of Financial Crises, *Columbia Journal of World Business*, Vol. 27, No. 1.

Quinn, B. (1993) The Bank of England's Role in Prudential Supervision, *BEQB*,. May.

Quinn, B. (1995) Banking Supervision in the Transitional Economy, *BEQB*, May.

Rabe, T. (1990) *Life Insurance and Pension Fund Regulation in the Federal Republic of Germany and the United Kingdom*, EDI, World Bank, June.

Regulation on Reporting (1985) Regulation regarding Reports and the Submission of Documents pursuant to the Banking Act (*Verordnung über die Anzeigen und die Vorlage von Unterlagen nach dem Gesetz über das Kreditwesen*), Germany, as amended.

Reid, M. (1986) Lessons for Bank Supervision from the Secondary-Banking Crises. In Gardener, E.P.M. (ed.) *UK Banking Supervision - Evolution, Practice and Issues*, London: Allen & Unwin.

Report of the Board of Banking Supervision Inquiry into the Circumstances of the Collapse of Barings (1995) Ordered by The House of Commons to be printed 18 July 1995, London: HMSO.

Report of the Commission of Enquiry into the Winding-up of the Short-term Insurance Business of the AA Mutual Insurance Association Limited (1988), South Africa.

Republic of South Africa (1984) *Final report of the Commission of Inquiry into the Monetary System and Monetary Policy in South Africa*, (De Kock Commission report), RP 70/1984.

Republic of South Africa (1992) *Report of the Committee of Investigation into the Promotion of Equal Competition for Funds in Financial Markets in South Africa*, (Jacobs Report), September.

Republic of South Africa (1993) *The Regulations to the Banks Act*, Act 94 of 1990, as amended.

Republiek van Suid Afrika (1985) *Debatte van die Volksraad (Hansard),* Tweede Sessie - Agste Parlement, 25 Januarie tot 19 Junie.

Reserve Bank of New Zealand (1993) Proposed revisions to banking supervision arrangements, *Financial Regulation Report*, June.

Revell, J.R.S. (1975) *Solvency and Regulation of Banks*, Bangor Occasional Papers in Economics, No. 5, Cardiff: University of Wales.

Revell, J.R.S. (1986) Capital Adequacy, Hidden Reserves and Provisions. In Gardener, E.P.M. (ed.) *UK Banking Supervision - Evolution, Practice and Issues*, London: Allen & Unwin.

Rhoades, S.A. (1993) Efficiency Effects of Horizontal (In-Market) Bank Mergers, *Journal of Banking and Finance*, Vol. 17, No. 2.

Riskmetrics™ (1994) *Introduction to Riskmetrics™*, Morgan Guarantee Trust Company, Market Risk Research, New York.

RKWG (1934) *Reichskreditwesengesetz*, Germany, as amended.

Rudolph, B. (1990) Capital Requirements of German Banks and the European Economic Community Proposals on Banking Supervision. In Dermine, J. (ed.) *European Banking in the 1990s*, Oxford: Blackwell.

Ryan, J.E. (1981) *Capital Adequacy - A Soundness Consideration for all Banks*, ICBS.

Sachs, J. (1996) Financial Crises in Emerging Markets: The Lessons from 1995. NBER Working Paper No 5576, May.

SAICA (1995) *Derivatives: Management Principles - The G30 Recommendations*, September.

Santomero, A.M. (1990) European Banking Post-1992: Lessons from the United States. In Dermine, J. (ed.) *European Banking in the 1990s*, Oxford: Blackwell.

Santomero, A.M. (1995) Financial Risk-management: The Why's and How's, *Financial Markets, Institutions and Instrument*, Vol. 4, No. 5.

Santomero, A.M. and Watson, R.D. (1977) Determining an Optimal Capital Standard for the Banking Industry, *Journal of Finance*, Vol. 32, No. 4.

Schaefer, S.M. (1987) The Design of Bank Regulation and Supervision: Some Lessons from the Theory of Finance. In Portes; R. and Swoboda, A.K. (eds.) *Threats to international financial stability*, Cambridge: Cambridge.

Scharrenberg, W. (1994) Neue Aufsichtsstrukturen für das Wertpapiergeschäft, *Sparkasse*, Vol. 2.

Schmid, P. (1987) The role of public policy in ensuring financial stability in Germany. In Portes, R. and Swoboda, A.K. (eds.) *Threats to international financial stability*, Cambridge: Cambridge.

Schneider, H. (1986) *The German Banking System - An introduction to the German banking system and the law on banking supervision with German text and synoptic English translations of the Federal Bank Act and other legal provisions*, Frankfurt am Main: Fritz Knapp.

Schoombee, G.A. (1991) *'n Vergelykende studie van die rol van die geldmark in monetêre beleidvoering in Suid Afrika, die Verenigde State van Amerika, die Verenigde Koninkryk, Kanada en Australië*, PhD-Thesis, University of Stellenbosch.

Schoombee, G.A. and Smith, A. (1995) Getting Commercial Banking Services to the Informal Sector: A Comparative Study of Asian Countries and South Africa. Paper prepared for an international conference on *Business Dynamics and Management Challenges in East Asia*, Brunei Darussalam, 24 - 26 November.

Schulungsheft der Volksbanken und Raiffeisenbanken (1993) *Das Kreditwesengesetz*, Vol. 14.

Schumpeter, J.A. (1911) *The Theory of Economic Development*, Translated from the German by Opie, R. (1934), Cambridge: Harvard University.

Second Banking Directive (1989) Second Council Directive on the Co-ordination of Laws, Regulations and Administrative Provisions Relating to the Taking Up and Pursuit of the Business of Credit Institutions and Amending Directives, European Community 89/780.

Shah, A.K. (1995) Regulatory Derivatives: Operating Error or System Failure, *Journal of Financial Regulation and Compliance*, Vol. 4, No 1.

Sharpe, S. (1995) Foreign banks 'have unfair tax break', *Business Day*, 20 April.

Sheldon, G. (1995) A Limit-Risk Capital Adequacy Rule: An Alternative Approach to Capital Adequacy Regulation for Banks with Empirical Application to Switzerland. In *Schweizerische Zeitschrift für Volkswirtschaft und Statistik*, Vol. 131, No. 4/2.

Shiers, A.F. (1994) Deposit Insurance and Banking System Risk: Some Empirical Evidence, *Quarterly Review of Economics and Finance*, Vol. 34, No. 4.

Solvency Ratio Directive (1989) The Council Directive of 1989 on a Solvency Ratio for Credit Institutions, European Community, 89/647.

South African Reserve Bank (1991), *Bank Supervision Department Annual Report 1991.*

South African Reserve Bank (1992), *Bank Supervision Department Annual Report 1992.*

South African Reserve Bank (1993(a)), *Bank Supervision Department Annual Report 1993.*

South African Reserve Bank (1993(b)) *Quarterly Bulletin*, No. 189.

South African Reserve Bank (1994), *Bank Supervision Department Annual Report 1994.*

South African Reserve Bank (1995(a)), *Bank Supervision Department Annual Report 1995.*

South African Reserve Bank (1995(b)) *Quarterly Bulletin*, No. 195.

South African Reserve Bank (1996(a)) *Quarterly Bulletin*, No. 199.

South African Reserve Bank (1996(b)) *Quarterly Bulletin*, No. 200.

Stals, C.L. (1991) *Recent Economic Developments and Monetary Policy in South Africa*, Address at a Seminar by the Business School of the University of Stellenbosch, 3 May.

Stals, C.L. (1994) The Macro-Economic Considerations and Impact of Deposit Insurance for South Africa, Contribution to the Workshop organised by the South African Reserve Bank: *Investor Protection in South Africa - Deposit Insurance or Not?*, Pretoria, September.

Stals, C.L. (1996(a)) *Consequences of South Africa's Integration in the Global Financial Markets*, Address at the Annual General Meeting of the French Chamber of Commerce and Industries, 23 April.

Stals, C.L. (1996(b)) Submission to the Section 417 Commission of Enquiry Into the Affairs of Tollgate Holdings Limited.

Steward, C. (1993) *Investor Protection and the Costs of Public Policy Failure*, Paper submitted in partial fulfillment of the requirements for the degree of Master of Commerce of Economics, School of Economics, University of Cape Town.

Steyn, G. (1996) Bond group to get exchange licence, *Business Day*, 9 January.

Stigler, G.J. (1978) The Theory of Economic Regulation, *Bell Journal of Economics and Management Science*, Vol. 2, No. 1.

Sushka, M.E. (1988) Bank Acquisitions and Stockholders' Wealth, *Journal of Banking and Finance*, Vol. 12, No. 4.

Swary, I. and Topf, B. (1992) *Global Financial Deregulation - Commercial Banking at the Crossroads*, Oxford: Blackwell.

Taylor, W. (1989) Statement to the U.S. House Subcommittee on International Development, Trade and Monetary Policy of the Committee on Banking, Finance and Urban Affairs, June 27, *Federal Reserve Bulletin*, Vol. 75, No. 8.

The Banker (1993) *Banking Supervision*, April.

The Banker (1996) *Striking the right balance*, August.

The Economist (1993(a)) *Banks as insurers - American Dream?*, 8 May.

The Economist (1993(b)) *Deposit insurance - A safer net,* 18 September.

The Economist (1993(c)) *The sum, not the parts,* 11 December.

The Economist (1994) *The capital handicap*, 26 February.

The Economist (1995) *Pocket World in Figures - 1995 Edition*, New York: Penguin

The Economist (1996(a)) *The domino effect - A survey of international banking,* 27 April.

The Economist (1996(b)) *Secrets and the prize,* 12 October.

The Economist (1996(c)) *American banking - With a whimper,* 2 November.

Thornton, J. (1992) Market Failure and Bank Regulation, *Service Industries Journal*, April.

Tobin, J. (1963) Commercial banks as creators of 'money'. In Carson, D. (ed.) *Banking and Monetary Studies*, Homewood: Richard D. Irwin.

Tobin, J. (1967) 'Comment' on A.H. Meltzer (1967) *Journal of Political Economy*, Vol. 75.

Tobin, J. (1984) On the efficiency of the financial system, *Lloyds Bank Review*, July.

Tobin, J. (1992) Financial Intermediaries. In Eatwell, J.; Milgate, M.; and Newman, P., (eds.) *The New Palgrave Dictionary of Money and Finance*, London: Stockten.

Van der Horst Verslag (1989) Verslag van die Komittee oor hul ondersoek na 'n Nasionale Raad vir Toesighouding oor Finansiële Instellings, Johannesburg, September.

Van Greuning, J.H. (1991) *'n Evaluering van die aard en relevantheid van banktoesighouding in 'n veranderende ekonomiese milieu*, MCom-Thesis, University of Pretoria.

Van Greuning, J.H. (1993) *The Implementation of a Risk-based Approach to Bank Supervision as a Micro-Economic Component of Monetary Policy*, DCom-Thesis, University of Pretoria.

Van Niekerk, P.D. (1987) *Big Bang and Financial Deregulation*, Thesis presented in partial fulfilment of the requirements for the degree of Master of Commerce at the University of Stellenbosch.

Vermeulen, A. (1995) Low interest rate deal for Afbank, *Business Day*, 25 October.
Vittas, D. (1991) *The Impact of Regulation on Financial Intermediation*, The World Bank Working Papers, August.
Von Keyserlingk, C. (1994) Bank-pos het nie sommerso gebeur, *Beeld*, 13 Junie.
Wansley, J.W. and Dhillon, U.S. (1989) Determinants of Valuation Effects for Security Offerings of Commercial Bank Holding Companies, *Journal of Financial Research*, Vol. 12, No. 3.
Weller, M. (1996) Bundesbank fights banks over minimum reserves, *Financial Regulation Report*, May.
Wiese, C. (1991) Bank Supervision, *Rekeningkunde SA*, Vol. 8, No. 11.
Wiese, C. (1995) Bank Supervision Department Minimum Standards, *Updates and Trends in Bank Supervision*, September.
Wilson Committee (1979) *Secondary Stage Evidence*, Vol. 3, London: HMSO.
Wood, J.H. (1981) Financial intermediaries and monetary control, *Journal of Monetary Economics*, Vol. 8, No. 2.

Interviews

De Swardt, C.J. (1994(a)) Deputy Governor, South African Reserve Bank, Pretoria, 6 June.
Rosenzweig, J. (1995) Interview with Rand Merchant Bank, Partner in charge of Financial Institutions, Price Waterhouse, Frankfurt.
Schoenmaker, D. (1995) Interview with Rand Merchant Bank, Professor of the London School of Economics, London.
Van Greuning, J. H. (1994) Registrar of Banks and Head of the Bank Supervision Department, South African Reserve Bank, Pretoria, 5 January.
Wiese, C. (1996(a)) Registrar of Banks and Head of the Bank Supervision Department, South African Reserve Bank, Pretoria, 29 January.
Wiese, C. (1996(b)) Registrar of Banks and Head of the Bank Supervision Department, South African Reserve Bank, Pretoria, 26 May.